**Eurasian Studies in Business and Economics** 10/1 *Series Editors:* Mehmet Huseyin Bilgin · Hakan Danis

Mehmet Huseyin Bilgin Hakan Danis Ender Demir Ugur Can *Editors* 

# Eurasian Business Perspectives

Proceedings of the 22nd Eurasia Business and Economics Society Conference





#### **Eurasian Studies in Business and Economics 10/1**

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Mehmet Huseyin Bilgin • Hakan Danis • Ender Demir • Ugur Can Editors

# Eurasian Business Perspectives

Proceedings of the 22nd Eurasia Business and Economics Society Conference



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#### **Preface**

This is the first volume (Eurasian Business Perspectives) of the tenth issue of the Springer's series Eurasian Studies in Business and Economics, which is the official book series of the Eurasia Business and Economics Society (EBES, www. ebesweb.org). This issue includes selected papers in the field of management presented at the 22nd EBES Conference that was held on May 24-26, 2017 at the Faculty of Economics of Sapienza University of Rome in Rome, Italy, with the support of Istanbul Economic Research Association. Jonathan Batten, Giuseppe Ciccarone, Giovanni Dosi, Klaus F. Zimmermann, and Marco Vivarelli joined the conference as the keynote speakers. All accepted papers for the issue went through peer-review process and benefited from the comments made during the conference as well. In 2015, EBES Executive Board decided to honor academicians for their lifetime contributions to their fields once a year. The EBES Fellows Award is given to acknowledge a lifetime of contributions to the corresponding academic field. Contributions may be theoretical, empirical, or methodological. The recipients for the EBES Fellow Award are determined by the EBES Executive Board and the Award is given every year at the EBES Conference in May. EBES Executive Board selected Giovanni Dosi as the EBES Fellow Award 2017 recipient for his outstanding contribution to the fields of the economics of innovation and technological change and evolutionary theory.

During the conference, participants had many productive discussions and exchanges that contributed to the success of the conference where 265 papers by 435 colleagues from 59 countries were presented. In addition to publication opportunities in EBES journals (Eurasian Business Review and Eurasian Economic Review, which are also published by Springer), conference participants were given opportunity to submit their full papers for this Issue.

Theoretical and empirical papers in the series cover diverse areas of business, economics, and finance from many different countries, providing a valuable opportunity to researchers, professionals, and students to catch up with the most recent studies in a diverse set of fields across many countries and regions.

vi Preface

The aim of the EBES conferences is to bring together scientists from business, finance, and economics fields, attract original research papers, and provide them publication opportunities. Each issue of the Eurasian Studies in Business and Economics covers a wide variety of topics from business and economics and provides empirical results from many different countries and regions that are less investigated in the existing literature. The current issue (Eurasian Business Perspectives) covers fields such as:

- 1. Entrepreneurship and internationalization
- 2. Accounting
- 3. Human resources
- 4. Management
- 5. Tourism and marketing

Although the papers in this issue may provide empirical results for a specific county or regions, we believe that the readers would have an opportunity to catch up with the most recent studies in a diverse set of fields across many countries and regions and empirical support for the existing literature. In addition, the findings from these papers could be valid for similar economies or regions.

On behalf of the Series Editors, Volume Editors, and EBES officers, I would like to thank all presenters, participants, board members, and the keynote speakers, and we are looking forward to seeing you at the upcoming EBES conferences.

Istanbul, Turkey Ender Demir

#### **Eurasia Business and Economics Society (EBES)**

*EBES* is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. EBES was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics but also encouraging the intellectual development of scholars. In spite of the term "Eurasia," the scope should be understood in its broadest terms as having a global emphasis.

EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and increase economics, finance, and business knowledge through academic discussions. To reach its goal, EBES benefits from its executive and advisory boards which consist of well-known academicians from all around the world. Every year, with the inclusion of new members, our executive and advisory boards became more diverse and influential. I would like to thank them for their support.

EBES conferences and journals are open to all economics, finance, and business scholars and professionals around the world. Any scholar or professional interested in economics, finance, and business is welcome to attend EBES conferences. Since 2012, EBES has been organizing three conferences every year. Since our first conference, around 9132 colleagues from 92 different countries have joined our conferences and 5240 academic papers have been presented. Also, in a very short period of time, EBES has reached 1713 members from 84 countries.

Since 2011, EBES has been publishing two academic journals. One of those journals, *Eurasian Business Review—EABR*, is in the fields of industry and business, and the other one, *Eurasian Economic Review—EAER*, is in the fields of economics and finance. Both journals are published thrice a year, and we are committed to having both journals included in SSCI as soon as possible. Both journals have been published by *Springer* since 2014 and are currently indexed in *Scopus*, the *Emerging Sources Citation Index* (Thomson Reuters), *EconLit*, *Google Scholar*, *EBSCO*, *ProQuest*, *ABI/INFORM*, *Business Source*, *International Bibliography of the Social Sciences (IBSS)*, *OCLC*, *Research Papers in Economics (RePEc)*, *Summon by ProQuest*, and *TOC Premier*.

Furthermore, since 2014 Springer has started to publish a new conference proceedings series (*Eurasian Studies in Business and Economics*) which includes selected papers from the EBES conferences. Also, the 10th, 11th, 12th, 13th, 14th, 15th, and 17th EBES Conference Proceedings have already been accepted for inclusion in the Thomson Reuters' *Conference Proceedings Citation Index*. The 16th, 18th, and subsequent conference proceedings are in progress.

On behalf of the EBES officers, I sincerely thank you for your participation and look forward to seeing you at our future conferences. In order to improve our future conferences, we welcome your comments and suggestions. Our success is only possible with your valuable feedback and support.

With my very best wishes,

Jonathan Batten, PhD President

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### Part I Entrepreneurship and Internationalization

#### From Entrepreneurial Orientation to Innovation: The Mediating Role of Information System—Case of Tunisian SMEs



#### Samah Chemli Horchani and Mahmoud Zouaoui

**Abstract** The object of the entrepreneur passes necessarily through the development of an entrepreneurship shared by all. The achievement of this object supports the introduction of an information system mobilizing technology impregnate by the environment in which the business operates. The objective of this study is to present a state of the literature on entrepreneurship, innovation and information systems. Therefore, we propose a conceptual model on entrepreneurship-innovation link. To provide more information, empirical investigation covering two cases of Tunisian SMEs. The observatory study, conducted through internships in companies, allowed us to see the evolution of the model after 30 years of operation. The analysis reveals important interactions between the various components of the proposed model. Overall, the study will provide relevant knowledge about the impact of entrepreneurial orientation on innovation, in particular through the information system.

**Keywords** Entrepreneurial orientation  $\cdot$  Radical innovation  $\cdot$  Incremental innovation  $\cdot$  Information system  $\cdot$  Environment

#### 1 Introduction

Radical innovation and incremental innovation have been the subject of several controversies concerning the conditions and mobilized tools leading to the implementation of an innovative business project. The importance is given to entrepreneurial guidance to help businesses to grow especially in a knowledge intensive environment (Astebro et al. 2013). Indeed, innovation and entrepreneurship are seen as connected so that the understanding of the first concept necessarily involves the understanding of the second (Schumpeter 1954). By result, entrepreneurship will enable a better understanding of the innovation dynamic's (Stolper 1994). Several researchers started to explore the significant determinants driving the degree of

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innovation and intensity (Stephan 2014). Attention is then drawn to the entrepreneur as the personification of innovation (Hagedoorn 1996). Claims are increasing restoring value to the "Man entrepreneur", which is the most exciting dimension but also the most difficult to master. The variety of characters and persuasions makes difficult the existence of a portrait type of entrepreneur. However, it would be possible to say that the entrepreneur is a person who does not behave in a traditional way view. He operates in an uncertain environment (McClelland 1972) where the Information Technology and Communication (ICT) reinforce this reality. Technology has long been considered the only determinant of the organization prosperity. However, technological imperialism is long gone, and technology substitution to human intelligence is quickly fallen. The impact of information technology on organizations emerges through complex interactions between technologies and actors. The technologies have also become a component enhancing organizational capital of the company. It is no longer possible to evaluate and study the technological performance by separating the human factor. Entrepreneurial orientation (EO) would be the magic hand giving the firm's ability to innovate. The entrepreneur must seek the necessary improvements to ensure the viability of his business. His way of directing seems to be decisive.

In this study, we examine the relationship between entrepreneurial orientation and innovation through the information system. The study investigates the effect of the perception of the environment by the information system on the intensity of innovation. Our empirical part focuses on the study of two cases (E1) and (E2) of small and medium enterprises (SMEs) in Tunisia. In the first case, the company will operate a radical innovation with "the father-son recovery" in order to pursue new opportunities while the second operates in continuous incremental innovations to address the environmental turbulence. We will try to make a comparative study between the two cases at the end to identify and better understand the reasons which led the two companies to process differently to changing environmental.

Indeed, the study choice results from the fact that research on entrepreneurship and innovation deal with questions of different roles played by small and large entrepreneurial firms (Hagedoorn 1996). Our goals are first to broaden the scope of study of entrepreneurship and innovation. Consequently, we will build and validate a conceptual model on entrepreneurship-innovation link. Research will acquire available relevant knowledge to SMEs about the impact of entrepreneurial orientation on innovation, in particular through the information system.

#### 2 Theoretical Background and Hypothesis Development

The questioning of the link between entrepreneurship and innovation through the information system is positioned by treating three essential components that are entrepreneurship, innovation and the information system. The study uses several theoretical fields such as resource-based theory (Roy 2010), the theory of organizational learning (Kim 1993; Leroy and Ramanantsoa 1997) the theory of knowledge

Paradigms	Authors	Principles	Interests
The business opportunity	Shane and Venkataraman (2000)	Identify and exploit opportunities.	Detection, evaluation and exploitation of sources of opportunities and individuals who discovers these opportunities.
The creation of an organization	Gartner (1990)	Create an organization by one or many persons.	Researchers are pushing the paradigm of the organization creation to the strategic organization development and even the transformation of business (Puhakka 2010).
Value creation	Bruyat and Julien (2001)	Create individual economic or social value.	The growth.
Innovation	Druker (1985) and Julien and Marchesnay (1996)	Critical importance of innovation in the definition of entrepreneurship.	The different forms of innovation.

**Table 1** The paradigms of entrepreneurship

Source: Based on Janssen (2009)

creation (Nonaka and Konno 1998), the contingency theory (Boyer and Freyssenet 2000) the theory of evolution (Schumpeter and Perroux 2008). The tangle of several theories gives a rich mosaic of well-established concepts studied.

#### 2.1 Entrepreneurial Orientation

The heterogeneity of the entrepreneurship field has not stopped researching classification attempts paradigms (Fayolle and Verstraete 2005). The distinction is made between four primary paradigms and which are summarized in Table 1.

Note that dominance is attributed to the search for a type or an ideal that leads to performance (Randerson and Fayolle 2010). The concept of entrepreneurial orientation was introduced by Miller (1983) defending the importance of the leader personality and his leadership in the organization. Leaders have an indispensable role on taking the organization to the achievement of performance. It is defined as strategic direction giving a specific aspect decisions and practices (Lumpkin and Dess 1996). The (EO) represents the processes, practices, and activities related to decision making that leads to organizational entrepreneurship (Covin and Slevin 1989). It is the ability of the organization to be leaders technologically, and its propensity to be proactive (Covin and Slevin 1991; Zahra and Covin 1995). It evokes the strength to pursue the opportunities and initiate innovations (Randerson and Fayolle 2010).

In the literature, five dimensions are attributed to the entrepreneurial orientation are the innovativeness, proactivity, risk taking, aggression towards the competition and autonomy (Miller 1983; Lumpkin and Dess 2001). The innovativeness

represents the tendency to engage and support a novelty (Lumpkin and Dess 1996). Risk-taking indicates the determination to use resources in strategies or uncertain projects (Zahra and Covin 1995). Proactivity is a replica of a business in attractive market opportunities (Lumpkin and Dess 1996). Competitive aggressiveness implies the willingness to retract instantly and eagerly competitors (Lumpkin and Dess 1996). Autonomy is the ability to make self-management measures in monitoring the market opportunities (Lumpkin and Dess 1996).

#### 2.2 Innovation

The analysis of key inputs on innovation shows that research has overridden the macroeconomic towards research-oriented company (Bhupatiraju et al. 2012). Schumpeter (1936) explains innovation as economic activity that changes the production function. They are driving developments. Crozier (1970) says innovation is triggered within an organization following a crisis. It reflects the choice of actors. This requires interventions on men and on organizational structures to introduce novelty into the culture of the company to act with the system. This requires "a relational, institutional breakdown, no mutual adjustment but initiatives and human leadership, learning processes necessary to the individual players responsibility (Crozier and Friedberg 1977). It reflects a situation in which a company manages to boost its sector to influence the structure and to convert the features to its privilege; it is a strategic intent, entrepreneurial ambition, a will to build the future (Roy 2010). Innovation has a new connotation. It is obtained by reversing an established arrangement and taking financial risks, rejection or indifference. It is synonymous with originality (Barreyre 1980). Thus innovation can be through the creation of a product, service or process (Tushman and Nadler 1986). Innovation can also implies the adoption of a new idea (Damanpour 1991). In any case, innovation must be evaluated in relation to the company where innovation is adopted (Johannessen et al. 2001). Innovation can also manifest itself in the market introduction of a novelty (Hermann et al. 2007). Therefore, it is the culmination of a whole construction process of trial and error, improvement to obtain an output (Corbel 2009). Several types of innovations have been made at past research. We have chosen to make a classification of innovation introduced by changing the intensity. The distinction is made between radical or significant innovation, and incremental or progressive innovation. Radical innovation is to break with the -clefs factors of environmental success in order to try to impose its own rules which create an imbalance in the market, resulting in this way a change of reference and mounted new competitors (Dumoulin and Simon 2005). The company is located in front of the obligation to change its field of activity and sometimes its trajectory and evolution. It is a creative destruction (Schumpeter 1936). According Pin et al. (2003), three approaches are being considered to make a break. The first is reactive, in which the firm develops a disruptive strategy to have the ability to survive in its environment. The second is a proactive approach that gives the company the

Theories	Authors	Contributions
Evolutionary theory	Schumpeter (1936), Nelson and Winter (1982)	The cognitive process is central to innovate and it is manifested through the routines and knowledge.
The resource- based theory	Barney (1991), Le Bars Anne (2001), Warnier (2003)	Companies can be distinguished by the possession of scarce resources which are sources of benefits competitive. Innovation results from a new combination of resources while preserving the business environment balance.
The competencies theory	Durand (2000)	Need for resources associated with cognitive processes in order to ensure coordination and interaction between the tangible resources (technology, equipment) and intangible resources (routines, knowledge, knowledge information)

Table 2 New approaches to innovation

possibility to change the environment in which it operates. The third is the synchronic harmonization of the two approaches. The firm adapts while possessing the ability to change the environment. The risk in this type of innovation is important as radical innovation requires significant investment and time.

Incremental innovations are continuous improvements of existing products or processes (Tarondeau 1994) by organizational learning, without requiring new doing-knowledge (Broustail and Fréry 1993). The risks of incremental innovation are limited. In the new approaches (resource based approaches, evolutionary theory, the competencies approaches) innovation is a set of combined resources (knowledge, skills, abilities) but also processes (Durand 2000). The main contributions are summarized in Table 2.

Routines are a knowledge acquired through repetitive actions, coordinating knowledge and individual skills (Coriat and Weinstein 1999) and the result of collective learning (Mack 1995). Knowledge is the source of distinction as they result from the unique history of each company (Karray-Driss 2001). The existence of a cognitive process will ensure organizational coordination (Durand 2000). These processes are manifested in the form of competences which are summarized in Table 3:

The literature review brings up, technology and management systems as key competence for company. The information systems are seen as a management tool for the conduct of the organization. They have several archetypes of use (Reix 2004). The information system is a source of competitive advantage (Ross et al. 1996). These systems leverage other intangible and complementary sources such as humans and business to acquire competitive advantages (Powell and Dent-Micallef 1997).

This idea was further developed in the theory of dynamic capabilities focusing on the firm provision to integrate, build and reconfigure its powers to deal with swift changes in the environment. Capacity is the work of an entrepreneurial desire to learn and cope with the changing environment and changing it (Tarondeau 1998). What would be the location of information systems as an object to be managed and a

Authors	Competences
Meyer and Utterback (1992)	Research and development Production and manufacturing Market
Barton (1992)	Learning and knowledge of employees Technological system Management system Value Company's system
Fowler et al. (2000)	Technological Market orientation Integrative
Spanos and Lioukas (2001)	Organizational Sale Techniques
Daneels (2002)	Technological Consumers
Wang et al. (2004)	Marketing Technological Integrative

**Table 3** The business competences

management tool? Will we have the opportunity to squeeze between the entrepreneurial orientation and innovation?

#### 2.3 The Information System

The information system is defined as a set of formal processes of capturing, treatment, storage and communication, based on technological tools, which provide support to transactional and decision making, as well as communication processes driven by corporate actors, individuals or groups of individuals in one or several organization (Kalika and Kefi 2004).

Thus, an information system has several dimensions:

- First an informational dimension. Indeed, the SI provides information to users. To
  be employable information must be translated into signals accessible to the
  senses, which leads to build an image of the real world (Kalika and Kefi 2004).
  This image or representation are the safe keepers of information, communication
  and the realization of models or concepts.
- Then the technological dimension of the information system representing the used tools such as the computer or software. These tools ensures the capture, transmission, storage, processing and retrieval of data in a communicable form (Reix 2004). The last dimension is an organizational dimension by facilitating the flow of work processes and providing more flexibility in the structure.

#### 3 Proposed Conceptual Model

After review of the literature, the question then concerns the relationship between entrepreneurial orientation and innovation through the information system? To answer this question, we developed three key assumptions:

 $\mathbf{H_1}$ : Entrepreneurial orientation has a positive impact on the information system.

Information systems as new technology, new daily carry endings. They thus represent sources of opportunities ensuring the development of new activities (Janssen 2009). The contractor, going in search of opportunities, must enjoy. The use of technology reveals two main aspects that are the "artifact" aspect, also said hardware/software, and the "use" aspect, showing how to use the technology in the different situations they meet (Orlikowski 2000). From this, the establishment of an information system must be accompanied by a strong involvement of the entrepreneur must be in constant contact with his staff and should explain what is expected of them on the use and behavior to have vis-à-vis these newly introduced technologies in the organization (Haines and Petit 1997). However, contractor's behavior is influenced by, first of situational factors (current environment) and secondly, by intrinsic factors personalities and individual stories (Bartoli et al. 1989). Representations, designs and developed strategies will then be influenced. Similarly, users who receive more support from their supervisors to use the system are more likely to be more satisfied and use it in a wide field (Haines and Petit 1997). The entrepreneur must have the conviction and the necessary involvement to end to encourage and supervise its business members. Therefore, the communication within an organization and information systems, as new technology, bring daily new endings. They represent sources of opportunities ensuring the development of new activities (Janssen 2009). The entrepreneur, going in search of opportunities, must enjoy it. The use of technology reveals two main aspects that are the aspect "artifact", also said hardware/software, and the "use" aspect, showing how to use the technology in different situations encountered (Orlikowski 2000). From this, the establishment of a system information must be accompanied by a strong involvement of the entrepreneur, who must be in constant contact with his staff and who have to explain what is expected of them on the use and behavior to have vis-à-vis of these newly introduced technologies in the organization (Haines and Petit 1997). However, entrepreneur's behavior is influenced by, firstly, the situational factors (current environment) and secondly, by intrinsic factors like personalities and individual stories (Bartoli et al. 1989).

Representations, conceptions of each individual as well as the strategies developed will then be influenced. Similarly, users who receive more support from their supervisors to use the system are more likely to be more satisfied and use it in a wide field (Haines and Petit 1997). The entrepreneur must have the conviction and the necessary involvement to end to encourage and supervise its business members. Therefore, the communication within an organization becomes an imperative favoring the establishment of information systems (Flynn and Foster 1984). The

implementation of the information system becomes a project require the explicit approval of the entrepreneur (Powell and Dent-Micallef 1998). Entrepreneurial orientation also means taking risks facing the uncertainty. Indeed "Decisions marking the strategic situations have, by definition, a large degree of uncertainty, to the extent that the available information is either partial or too numerous, ambiguous, biased or impossible to obtain because it key to the future and must consider other (Puthod 1998). Identifying the informational utility allows decision makers to customize the information that will be their advantage, and so have appropriate information (Ammar 2003). The entrepreneur aim to develop information systems that are compatible with their activities and that facilitate their daily lives.

#### **H**<sub>2</sub>: The information system has a positive impact on innovation.

Two levels can be presented. The first level is located within the company. The information system facilitates communication and vertical/horizontal coordination (Fulk and De Sanctis 1995). This encourages collaboration and information sharing between the members of the organization. Different stakeholders can work at the same time, it is concurrent engineering, with interactions continue (Davidow and Malone 1992) which support the design of new products or the absorption of new procedures. Then, the information systems undertake a high correlation among workstations, greater communication collateral, less hierarchy, and greater flexibility in the ability to respond to market changes.

The second level is outside the company. In fact, the uncertainty related to the context of innovation requires anticipating customer needs and prediction of actions and reactions of competitors. Having the sources of information at the right time, effective treatment with appropriate tools and adequate transmission in the business can reduce uncertainty and encourage the development of innovation (Janssen 2009). Information systems then offer well-developed databases, which reduces the response time to market changes and the environment (Ammar 2003).

#### H<sub>3</sub>: The information system has a mediating role between the EO and innovation.

When the entrepreneur makes the decision to innovate, each step coincides with a particular need for certain types of information (Lebraty 2002). Thus, for the initiation phase of defining the problems or opportunities, it requires information to ensure the measurement and comparison of the company performance given the environment that influences its behavior. The design phase requires information that will enable a causal analysis of the situation determinants especially those over which the company has the ability to act. The selection phase uses information forecasts and estimates for assessing the consequences of each of feasible actions. The implementation phase requires, again, indicators and measuring performance achievements.

The Link between entrepreneurial orientation and innovation through information systems ensures the involvement of the organization members in the establishment process and innovation development. Information systems can be used as differentiation tools by providing strategic and organizational opportunities that did not exist before. Learning through the use of technology may result in cognitive evolution

facilitating strategic choices often depend on dynamic capabilities inherited from the past trajectory (Teece 1998).

#### 4 Research Methodology

In the preliminary field work, a synthesis of knowledge on entrepreneurial orientation, innovation and the information system was carried out on the basis of the available literature. This synthesis has enlightened us on the fact that entrepreneurial orientation, innovation and the information system are broad concepts and difficult to view measured they acquire their specificity in the company or they develop. For this reason, we opted for an observatory study. But reliability in qualitative research depends on the researcher's ability to soak up the field of the study and to return it.

As a result, we were among the companies studied and we observed the actants in their relationship with information technology and in everyday life. Our presence in offices and workplaces has allowed us to see the entrepreneurs in their immediate environment, to see the style of communication with their staff; this was a mine of information and gave us access context. Our observation was made in two important steps through internships in the companies studied separated in time. In the second stage, data collection was made from a trilogy in the method; we conducted interviews, made observations and conducted a literature review (De La Ville 2000).

We can qualify our discussions as semi-structured guided. We conducted semi-structured interviews using an interview guide containing open questions related to the themes of our research and questions of the interview guide were put to the respondent (Roussel and Wacheux 2005). The document used is collected on the workplace but also through the Internet. This triangulation of different resorting to various means (observation, interviews, documentation) and aimed to enhance the reliability and internal validity of the results (Miles and Huberman 2003). We made an intra-site analysis to study each case in depth, and in its particular context. Then we proceed to go back and forth between the case and theoretical frameworks offering a comparison of the explanatory power of conceptual grids, to develop a critical approach and refine the theoretical sensitivity according to the observed results.

#### 5 Results

The Tunisian economy is based on SMEs; the study examined two cases of SMEs working in the textile sector.

In the first observation period, the environments in which companies are obliged stewardship and associated experience daily the developments at the operation level. The information and business intelligence often go together and sometimes merge in search of corporate interests. They consist of the basic elements and essential

stimulants in decision making and implementation of various business activities. Entrepreneurs, personally, make periodic visits to customers and detect their impressions on products. Then Informal information is formed by rumors or discreet and unpublished news. It can postpone the closure of a business, the extension of another, the arrival of sophisticated and more productive equipment that we want to avoid propaganda. Once the information gathered, they will be sorted in order to identify useful information. This information will provide vital support to make decisions about how much to produce the quantities to stoker, products designs, markets to exploit price changes. In other words, information lights the ways to follow in the short term and the long term. This Approach may change at any time during the get new information that requires action or rapid response. In this context, the head of (E1) states that the size of the company makes its flexibility and rapid adaptation to its environment. They ask their opinion on new market trends and new models. With the information and business intelligence, the entrepreneurs-managers have acquired valuable experience that allows them to avoid past mistakes and to see more clearly in business. Both companies have no specialized service in information, but all members of the undertaking to integrate and intervene in the search for information. They become both sources and information officers. Such behavior assists all their actions and decisions. Two types of information are detected in both cases. Firstly the formal information that comes from suppliers of equipment and raw materials, sister organizations, the media.

Then, we have the informal information under rumors or discrete and unpublished news. They can postpone the closure of a business, the extension of another, the arrival of sophisticated and more productive equipment that we want to avoid propaganda. Once the information gathered, they will be sorted in order to identify useful information. This information will provide vital support to make decisions about how much to produce the quantities to stoker, products designs, markets to exploit price changes. In other words, the path to follow in the short and long term will be described. This Approach may change at any time during the get new information that requires action or rapid response. In this context, the head of (E1) states that the size of the company makes its flexibility and rapid adaptation to its environment.

In both cases the entrepreneurial orientation is provided by the founder-director. In the first case (E1), the leader conducts work planning while setting short-term and long-term goals. However, it should be noted that the plans are not rigid and are affected by several internal and external factors. For internal factors, it should be noted that the contractor and staff cooperate to ensure the prosperity of their undertaking. In this context, it is essential to stress the importance of the entrepreneur qualities. The latter is in contact with employees who are not only sources of information, but also innovative ideas for improving work flow and product flow. For external factors, the leader tries to have a realistic view of the future of his business. This vision is reflected in the direction to be taken using available information. The activity in (E1) revolves around the leader representing the Company's core. He plays the role of father ensuring that handles these workers in their travails and directs them to the right path.

In the case (E2), entrepreneurial orientation manifests itself daily. Planning for the long term is absent, which may be related to the market and the fashion phenomenon that changes with the seasons and changes with changing consumer tastes. These changes are imposed on employees who have to adapt without the need to give their opinions. Contact with the entrepreneur remains easy but there is a strong centralization of power at the level of management. The leader retained his role as a father giving advice and orders to its employees to direct. Innovations are incremental. They manifest their self's in response to the needs of demand.

The second period of observation is made after the revolution. Note that during this period many companies have suffered from the socio-economic instability that prevailed in the country. We looked at two cases studied previously. For (E2), there has been an increase in the size of the company and a change in the local; the activity also expands and found a passage in the script set to subcontracting. However, the leader claims the conditions of work, funding problems and the risk of losing customers subcontractors. It operates continuously innovations in the production process while claiming employee resistance.

According to the leader of (E2) radical innovations are not possible at least because of their high costs but also because of the lack of a model creation unit in its company. Innovation is done continuously in response to the environment. For (E1), contact with the officer was surprising us. Indeed, following the rapid changes those have affected the Tunisian market, the manager decided to stop its activity because the market is no longer profit-bringer.

That decision coincided with the appearance of the company of his son. Indeed, after the field investigation, it has been found that in this case, the contractor has made a technological breakthrough by selling the old machine and the purchase of new equipment for the new son-activity, a legal break by changing the company name and finally a commercial break by the change of the industry and the market target.

This observation has allowed us to open the insertion path of takeover entrepreneurship in the field of entrepreneurship (Boumedjaoud 2016). The transferor- father did enjoy the son- buyer of his experience and all his cognitive, physical and financial capacity to support the new business. In this sense, the research put the emphasis on the transferor and its ability to mourn his company (Bah 2009). A new company has newly born crawling with the past and pursuing new opportunities.

#### 6 Conclusion

We can see that The EO leads to different types of innovation and this is through different perceptions and information systems. The father's support is indispensable in the development of his son's business. More questions can then be asked about the role of the intellectual and financial capital transfer in family businesses. It would be possible to see that: When we speak about EO and Innovation, the prospects have to be open to make a choice supporting a new development. The freedom of adjustment

of means, the satisfaction of the stakeholders and the viability of the company are the key components of a rigorous management and carrying a bearer of a fruitful future. A spark spouts out at the time of the contact between the company and its environment injecting a magic of rebirth for the company: "The rupture" which is essential keep the doors open to a rich future of promises.

#### References

- Ammar, A. (2003). L'impact de l'ERP sur la prise de décision [The impact of ERP on decision-making]. In *8èmeColloque de l'Association Information et Management (AIM)* (pp. 1–10). France: SIM.
- Astebro, T., Braunerhjelm, P., & Brostrôm, A. (2013). Does academic entrepreneurship pay? *Industrial and Corporate Change*, 22(1), 281–311.
- Bah, T. (2009). La transition cédant-repreneur: Une approche par la théorie du deuil [The transferor-taker transition: An approach by the theory of mourning]. Revue Française de Gestion, 194(4), 123–148.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.
- Barreyre, P. Y. (1980). Typologie des innovations [Typology of innovations]. *Revue Française de Gestion*, 27, 9–15.
- Bartoli, A., Hermel, P., & Mérigot, J. G. (1989). *Le développement de l'entreprise: Nouvelles conceptions et pratiques* [Business development: New designs and practices]. Paris: Economica.
- Barton, L. (1992). Core capability and core rigidity: A paradox in managing new product development. *Strategic Management Journal*, 13(S1), 111–125.
- Bhupatiraju, S., Normale, O., Triulzi, G., & Verspagen, B. (2012). Knowledge flows analyzing the score literature of innovation, entrepreneurship and science and technology studies. *Research Policy*, 41, 1205–1218.
- Boumedjaoud, D. (2016). Reprise d'entreprises et poursuite d'opportunités: Nouvelles perspectives de recherche [Business recovery and pursuit of opportunities: New research perspectives]. In XXVe Conférence Internationale de Management Stratégique (pp. 1–30). Tunis: AIMS.
- Boyer, R., & Freyssenet, M. (2000). Les modèles productifs [Productive models]. Paris: La Découverte.
- Broustail, J., & Fréry, F. (1993). *Le management stratégique de l'innovation* [Strategic management of innovation]. Paris: Éditions Dalloz.
- Bruyat, C., & Julien, A. P. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165–180.
- Corbel, P. (2009). *Technologie, innovation, stratégie: De l'innovation technologique à l'innovation stratégique* [Technology, innovation, strategy: From technological innovation to strategic innovation]. Paris: Gualino.
- Coriat, B., & Weinstein, O. (1999). La théorie évolutionniste de la firme. In M. Basle (Ed.), *Approches évolutionnistes de la firme et de l'industrie* [The evolutionary theory of the firm, in Evolutionist approach of the firm and the industry] (pp. 3–25). Paris: L'Harmattan.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10, 75–87.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship: Theory and Practice, 16*, 7–25.
- Crozier, M. (1970). La société bloquée [The blocked society]. Paris: Editions du Seuil.
- Crozier, M., & Friedberg, E. (1977). L'acteur et le système: Les contraintes de l'action collective [The actor and the system: The constraints of collective action]. Paris: Editions du Seuil.

- Damanpour, F. (1991). Organizational innovation: A meta-analysis of determinants and moderators. *Academy of Management Journal*, 34(3), 555–590.
- Daneels, E. (2002). The dynamics of product innovation and firm competences. Strategic Management Journal, 23(12), 1095–1121.
- Davidow, W. H., & Malone, M. S. (1992). *The virtual corporation*. New York: Harper Collins Publishers.
- De La Ville, V. I. (2000). La recherche idiographique en management stratégique: Une pratique en quête de méthode? [Idiographic research in strategic management: A practice in search of a method?]. Finance Contrôle Stratégie, 3(3), 73–99.
- Druker, P. (1985). Entrepreneurship and innovation: Practices and principles. New York: Harper Business.
- Dumoulin, R., & Simon, E. (2005). Stratégie de rupture et PME: La réplication impossible [Break strategy and SMEs: Impossible replication]. *Revue Française de Gestion*, 2(5), 75–95.
- Durand, T. (2000). L'alchémie de la competence [The alchemy of competence]. Revue Française de Gestion, 127, 84–102.
- Fayolle, A., & Verstraete, T. (2005). Paradigmes et entrepreneuriat [Paradigms and entrepreneurship]. Revue de l'entrepreneuriat, 14(1), 33–52.
- Flynn, D., & Foster, L. (1984). Management information technology: Its effects on organizational form and function. *MIS Quarterly*, 8(4), 229–236.
- Fowler, S. W., Wilcox, K. A., Marsh, S. J., & Victor, B. (2000). Beyond products: New strategic imperatives for developing competencies in dynamic environments. *Journal of Engineering and Technology Management*, 3(4), 357–377.
- Fulk, J., & De Sanctis, G. (1995). Electronic communication and changing organizational forms. *Organization Science*, *6*(4), 337–349.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship. *Journal of Business Venturing*, 5(1), 15–28.
- Hagedoorn, J. (1996). Innovation and entrepreneurship: Schumpeter revisited. *Industrial and Corporate Change*, 5(3), 883–896.
- Haines, V. Y., & Petit, A. (1997). Conditions for successful human resource information system. Human Resource Management, 36, 261–275.
- Hermann, A., Gassmann, O., & Eisert, U. (2007). An empirical study of the antecedents for radical product innovations and capabilities for transformation. *Journal of Engineering and Technology Management*, 24, 92–120.
- Janssen, F. (2009). *Entreprendre: Une introduction à l'entrepreneuriat, Petites entreprises et entrepreneuriat* [Entrepreneurship: An introduction to entrepreneurship, small business and entrepreneurship]. Paris: De Boeck.
- Johannessen, J. A., Olsen, B., & Lumpkin, G. T. (2001). Innovation as newness: What is new, how new, and new to whom? *European Journal of Innovation Management*, 4(1), 20–31.
- Julien, A. P., & Marchesnay, M. (1996). L'Entrepreneuriat [Entrepreneurship]. Paris: Economica. Kalika, M., & Kefi, H. (2004). Evaluation des systèmes d'information: Une perspective
  - organisationnelle [Evaluation of information systems: An organizational perspective] (No. hal-00155610).
- Karray-Driss, Z. (2001). Coopération technologique des firmes et compétences pour innover: Une modélisation des choix appliquée à l'industrie française [Technological cooperation of firms and skills to innovate: A modeling of choices applied to French industry]. Doctoral dissertation, Toulouse 1.
- Kim, D. H. (1993). The link between individual and organizational learning. *Sloan Management Review*, *35*(Fall), 37–50.
- Le Bars Anne, A. (2001). *Innovation sans recherche: Les compétences pour innover dans les PME de l'agro-alimentaire* [Innovation without research: Skills for innovation in agribusiness SMEs]. Doctoral dissertation, Grenoble 2.

- Lebraty, J. F. (2002). Une vision cognitive des systèmes d'aide à la décision. In F. Rowe (Ed.), *Faire de la recherche en systèmes d'information* [A cognitive vision of decision support systems, in Do research in information systems] (pp. 103–127). Paris: Vuibert.
- Leroy, F., & Ramanantsoa, B. (1997). The cognitive and behavioural dimensions of organizational learning in a merger: An empirical study. *Journal of Management Studies*, 34(6), 871–894.
- Lumpkin, T. G., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Lumpkin, T. G., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429–451.
- Mack, M. (1995). L'organisation apprenante comme système de transformation de la connaissance en valeur [The learning organization as a system of knowledge transformation in value]. *Revue Française de Gestion*, 105, 43–48.
- McClelland, D. C. (1972). Opinions predict opinions: So what else is new? *Journal of Consulting and Clinical Psychology*, 38, 325–326.
- Meyer, H., & Utterback, J. (1992). Core competencies, product families and sustained business success. In Sloan school of strategic management. [PDF] Montréal: ICRMT. Accessed February 1992, from https://dspace.mit.edu/bitstream/handle/1721.1/2400/SWP-3410-25771050.pdf
- Miles, M., & Huberman, A. (2003). *Analyse des données qualitatives* [Analysis of qualitative data]. Paris: De Boeck.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29, 770–791.
- Nelson, R. R., & Winter, G. S. (1982). *An evolutionary theory of economic change*. Cambridge: Harvard University Press.
- Nonaka, I., & Konno, N. (1998). The concept of "ba": Building a foundation for knowledge creation. California Management Review, 40(3), 40–54.
- Orlikowski, W. J. (2000). Using technology and constituting structures: A practice lensfor studying technology in organizations. *Organizational Science*, 11(4), 404–428.
- Pin, R., Métais, E., & Dumoulin, R.. (2003). Vers Un Dépassement De L'antinomie Entre Rupture Et Continuité: Le Cas Valéo [Towards an exceeding of the antinomy between breaking and continuity: The Valéo case]. In XIIème Conférence de l'Association Internationale du Management Stratégique (pp. 1–24). Carthage: AIMS.
- Powell, T., & Dent-Micallef, A. (1997). Information technology as competitive advantage: The role of human, business and technology resources. Strategic Management Journal, 18(5), 375–405.
- Powell, T., & Dent-Micallef, A. (1998). Technologies de l'information: Nécessités stratégiques ou sources d'avantage concurrentiel? Une étude empirique dans le secteur de la distribution automobile aux Etats-Unis [Information technology: Strategic needs or sources of competitive advantage? An empirical study in the car distribution sector in the United States]. Canadian Journal of Administrative Sciences, 15(1), 39–64.
- Puhakka, V. (2010). Versatile and flexible use of intellectual capital in entrepreneurial opportunity discovery. *Journal of Management Research*, 2(1), 1–26.
- Puthod, D. (1998). Un modèle d'exploitation des pôles de compétences dans le contexte de l'organisation et de la décision [An operating model of competence centers in the context of the organization and the decision]. VII<sup>e</sup> Conférence de l'Association Internationale du Management Stratégique (pp. 26–28). Louvain-La-Neuve: AIMS.
- Randerson, K., & Fayolle, A. (2010). Management et orientation entrepreneuriale: Deux concepts si différents? *Management & Avenir*, 39(9), 124–135.
- Reix, R. (2004). Systèmes d'information et management des organisations [Information systems and organization management]. Paris: Vuibert.
- Ross, J., Mathis Beath, C., & Goodhue, D. (1996). Develop long term competitiveness through IT assets. Sloan Management Review, 38, 31–42.

- Roussel, P., & Wacheux, F. (2005). Management des ressources humaines: Méthodes de recherche en sciences humaines et sociales [Human resources management: Research methods in humanities and social sciences]. De Boeck Supérieur.
- Roy, P. (2010). Les nouvelles stratégies concurrentielles [New competitive strategies]. La Découverte.
- Schumpeter, A. J. (1936). The theory of economic development: An inquiry into profits, capital credit, Interest and business cycle. Cambridge: Harvard University Press.
- Schumpeter, A. J. (1954). History of economic analysis. New York: Allen&Unwin.
- Schumpeter, J. A., & Perroux, F. (2008). *Théorie de l'évolution économique: Recherches sur le profit, le crédit, l? intérêt et le cycle de la conjonctureconjoncture* [Theory of economic evolution, research on profit, credit, interest and the business cycle]: Introduction. J.-M. Tremblay. Quebec: Collection Science Sociale (pp. 1–224). Accessed October 21, 2008, from <a href="https://doi.org/10.1522/cla.pef.pen">https://doi.org/10.1522/cla.pef.pen</a>
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 125*(1), 217–226.
- Spanos, E. Y., & Lioukas, S. (2001). An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. Strategic Management Journal, 22(10), 907–934.
- Stephan, A. (2014). Are public research spin-offs more innovative? *Small Business Economics*, 43 (2), 353–368.
- Stolper, W. F. (1994). *Joseph Alois Schumpeter: The public life of a private man*. Princeton: Princeton University Press.
- Tarondeau, J. C. (1994). *Recherche et développement* [Research and development]. Paris: Vuibert. Tarondeau, J. C. (1998). *Le management des savoirs* [Knowledge management]. Paris: PUF.
- Teece, D. (1998). Capturing value from technological innovation: Integration, strategic partnering, and licensing decisions. *Interface*, 18, 46–61.
- Tushman, T., & Nadler, D. (1986). Organizing for innovation. *California Management Review*, 28 (3), 74–92.
- Wang, Y., Lo, H. P., & Yang, Y. (2004). The constituents of core competencies and firm performance: Evidence from high-technology firms in China. *Journal of Engineering and Technology Management*, 21(4), 249–280.
- Warnier, V. (2003). *Trajectoire de compétences stratégiques et dynamiques inter firmes dans un secteur: Le cas de l'industrie de dentelle* [Trajectory of strategic competences and inter-firm dynamic in a sector: The case of the lace industry]. In XIIème conférence de l'Association Internationale du Management Stratégique (pp. 1–25). Carthage: AIMS.
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneur venture. *Entrepreneurial Journal*, 10(1), 43–58.

# Complexity Theory in the Advancement of Entrepreneurship Ecosystem Research: Future Research Directions



Zeynab Aeeni and Mehrzad Saeedikiya

**Abstract** The underlying principles of complexity theory has been disused in "five dimensions of non-linear interactions between agents and components", "hierarchical nature of the system", "emergence", "co-evolutionary order creation", and "self-organization". The rationale for considering entrepreneurship ecosystem as a complex system has been presented. Then, the application of complexity theory for the study of entrepreneurship ecosystem and future research directions have been comprehensively discussed. The paper contributes to the entrepreneurship research with its emphasis on the application of complexity theory as a new line of reasoning for the study of entrepreneurial ecosystems.

**Keywords** Entrepreneurship ecosystem · Complexity theory · Complex system

#### 1 Introduction

Entrepreneurship is a phenomenon that occurs in a process (Bygrave and Hofer 1991) and many factors and actors are involved in its realization (Stam 2015; Mason and Brown 2014; Neck et al. 2004; Van de Van 1993). However, many previous research have discretely studied the actions of the agents, events, or organizations alone. It must be admitted that the realization of the entrepreneurial process depends on actors and several factors; thus, it does not seem logical to study each of them as a separate identity independent of other factors (Neck et al. 2004). The improvement of entrepreneurship depends on processes that govern the interaction between these factors and actors (Vogel and Fischler-Strasak 2014). Such a requirement has led to the formation of a new approach in the field of entrepreneurship which is called

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entrepreneurship ecosystem. Entrepreneurship ecosystem is collection of entrepreneurial activities and resources that result in a productive entrepreneurial dynamic in a region or country (Acs et al. 2015). In other words, entrepreneurship ecosystem is a new and distinct approach which puts an emphasis on collaboration between lots of elements involved in entrepreneurship which in the past had independently and separately been examined in the literature (Mason and Brown 2014). It covers a set of different interdependent and interconnected actors and factors within a certain territory (Kantis and Federico 2012; Mason and Brown 2014; Stam 2015; Vogel and Fischler-Strasak 2014) that must fit in their proper places in the ecosystem to result in an entrepreneurial activity (Neck et al. 2004). Based on this approach, the entrepreneurial process and entrepreneurship ecosystem where it takes place in simultaneously feed and support each other and are interdependent (Neck et al. 2004; Cohen 2006). In fact, the ecosystem approach provides a framework for reviewing the interaction and communication between people and their environment and it refers to a combination of factors that play a role in entrepreneurship development (Pereverzeva 2015).

The history and empirical and theoretical foundations of entrepreneurship ecosystem approach dates back to recent years. Moreover, the literature on entrepreneurship ecosystem is rather shallow and is still in its early stages so that previous research is mostly empirical and descriptive. They mainly provide a list of relevant factors without a clear argument on causal relations between the factors; in addition, they present no clear explanation of interaction between the proposed factors and entrepreneurship (Stam 2015). In fact, the realm of research on the entrepreneurship ecosystem is still in its infancy and faced with vacuum in theorizing. In order to develop this field of research it is necessary to make considerable theoretical efforts so that to put forward theories that will provide a basis for many subsequent experimental works.

In order to fill this gap, this paper aims to propose a reliable theoretical basis to be used for determination of paths for future research with a focus on theory building in the field of on entrepreneurship ecosystem and related topics and variables. Because of the richness of complexity theory, it has had a theoretical contribution in a wide range of scientific fields. The interdisciplinary nature of complexity theory can be verified by observing the footprints of the theory in the realm of natural, social, and artificial ecosystems (Frenken 2006). Hence, despite overlooking complexity theory in the realm of entrepreneurship ecosystem, complexity science in general and complexity theory in particular can propose remarkable insights for understanding this phenomenon and enriching related research.

In view of that, in this study we propose complexity theory as a theoretical basis for research on entrepreneurship ecosystem so that it can resolve major shortcomings in current research and clarify the direction and paths for future research. Making an allowance for this theory, we explain the research paths for further theoretical works in the field of entrepreneurial ecosystem. In addition, we also suggest further research topics that can fill the gaps in existing literature.

Accordingly, the rest of the paper is organized as follows. In the next part, we discuss the current situation of entrepreneurship ecosystem research highlighting the

most important available studies and their main focus. In the third part, we explain the complexity theory and complex systems and review their most important features. In the fourth part, we briefly address the status of the complexity theory in entrepreneurship research and summarize the main studies in this area. In the fifth part, the logic for the utilization of complexity theory as a theoretical basis of the entrepreneurship ecosystem research and the directions for future research will be presented.

# 2 Entrepreneurship Ecosystem Research, the Current Situation

Most of previous research in the field of entrepreneurship that are focused on entrepreneurs has overlooked the historical and gradual evolution and actions of actors and even neglected several factors behind the creation of entrepreneurial infrastructure (Neck et al. 2004). Recent research on entrepreneurship suggests that entrepreneurship is a difficult and multi-dimensional and multilevel phenomenon and in order to enhance this phenomenon it is necessary to consider dynamic processes which describe the interaction between multiple external factors, regional and local conditions, and the entrepreneurs or innovators (Vogel and Fischler-Strasak 2014). This approach aims to stress the importance of social and environmental factors that are beyond the control of individuals (The Government of India, Planning Commission 2012). Based on the underlying assumption of this approach, the performance of launched businesses is influenced by the factors other than the business itself, in other words it is affected by the ecosystem that surrounds the business (Fuerlinger et al. 2015). The quality of the entrepreneurship ecosystem affects not only the entrepreneurs and their businesses, but also the overall national entrepreneurial performance and their level of novelty (Manimala et al. 2015). Entrepreneurship ecosystem not only acts as a catalyst for accelerating economic development in communities with static economies but also it could serve as a major provocative factor for economies undergoing decline and stagnation (The Government of India, Planning Commission 2012).

The common point shared between entrepreneurship ecosystem and other similar typologies such as clusters, industrial zones, innovation system is their emphasis on the external business environment. Moreover, the focus on the entrepreneur is the point which makes a distinction between these concepts and the entrepreneurship ecosystem. Compared to its similar typologies, entrepreneurship ecosystem approach not only considers entrepreneurship as the outcome of a system but also does not neglect the importance of entrepreneurs as one of the key players in creating and maintaining the health and survival of the system (Stam 2015). Most definitions proposed for entrepreneurship ecosystem are suggesting interconnections between economic agents and imply the fact that their success and survival are dependent to each other (Mason and Brown 2014). In other words, entrepreneurship ecosystem is

considered as a set of interdependent elements and actors that are formed with the following aims: creating new business ventures (Van de Van 1993; Vogel and Fischler-Strasak 2014), achieving sustainable development through the formation of new stable businesses (Cohen 2006), creating wealth and economic prosperity (Prahalad 2005), developing a platform for the alliance of entrepreneurial actors (Mason and Brown 2014), and enabling a productive entrepreneurship (Stam 2015).

Because of the importance of the ecosystem approach in the field of entrepreneurship research, in recent years many studies have been conducted on various related topics. The first studies of entrepreneurship ecosystem can be traced in the work of Neck et al. (2004). After that, Cohen (2006) made an effort to propose a typological framework for investigating the interaction between multiple components existing in entrepreneurship ecosystem. Later, other scholars sought to introduce some frameworks and models for entrepreneurship ecosystem (such as Neck et al. 2004; Isenberg 2011; Suresh and Ramraj 2012; Foster and Shimizu 2013; Stam 2015). Other researchers also conducted research on other related topics such as components and dimensions of entrepreneurship ecosystem (Bernardez and Mead 2009; Vogel and Fischler-Strasak 2014; Kline et al. 2014; Mason and Brown 2014), identifying factors affecting the formation of entrepreneurship ecosystem (Cohen 2006; Arruda et al. 2013), types of entrepreneurship ecosystem (Bernardez and Mead 2009), role of policies in shaping the ecosystem (Kantis and Federico 2012; Fuerlinger et al. 2015), key factors involved in the success or failure of entrepreneurship ecosystem (Vogel and Fischler-Strasak 2014; Kshetri 2014; Pereverzeva 2015), and indices for measuring the entrepreneurship ecosystem performance (Acs et al. 2014). Table 1 summarizes these research efforts as well as their focus area.

It is worthy to mention some key points regarding to the entrepreneurial ecosystem literature. First, many of these studies overlap. A part of the literature which aimed to provide a model or framework for entrepreneurship ecosystem has merely presented the dimensions and components of the ecosystem. These components and factors are mostly repeated in ecosystem literature. Second, as stated by Stam (2015)

Focus	Authors
Frameworks and models for entrepreneurship ecosystem	Neck et al. (2004), Isenberg (2011), Foster and Shimizu (2013), Stam (2015)
Components and dimensions of entrepreneurship ecosystem	Fetters et al. (2010), Vogel and Fischler-Strasak (2014), Kline et al. (2014), Mason and Brown (2014)
Factors affecting the formation of entre- preneurship ecosystem	Cohen (2006), Arruda et al. (2013)
Types of ecosystems	Bernardez and Mead (2009)
Role of policies in shaping the ecosystem	Kantis and Federico (2012), Fuerlinger et al. (2015)
Key factors involved in the success or failure of entrepreneurship ecosystem	Vogel and Fischler-Strasak (2014), Kshetri (2014), Pereverzeva (2015)
Indices for measuring the performance of entrepreneurship ecosystem	Acs et al. (2014)

Table 1 Entrepreneurship ecosystem literature and their focal points

most studies are descriptive and experimental and as a result, a little significant theoretical contribution is observable in the majority of research. Third, the current state of entrepreneurship ecosystem research lacks a rigorous and holistic theory and this keeps the domain under the dominance of the fragmented and islandic theories applicable to study the components of the ecosystem separately not suitable for studying it as a whole. Therefore, we are still faced with many unanswered questions especially in theoretical side about the relationship between the components of ecosystems and their interaction mechanism in entrepreneurship, the importance of various components in the ecosystem, explanation of the formation and evolution of ecosystems over time, etc. We hold that to be more efficient, entrepreneurship ecosystem research has to not only expand in theoretical aspects but, to build on a more holistic and comprehensive theoretical grounds.

As mentioned earlier, in this study we suggest applying complexity theory as a theoretical basis i.e. we show how complexity theory is consistent with the ecosystem approach in general and entrepreneurship ecosystem in particular to enhance the theoretical grounds. Accordingly, the following section discusses the main features of complex systems and complexity theory.

### 3 Complex Systems and Complexity Theory

The history of complexity studies in the fields of physical and biological sciences dates back to the 1950s (Fuller et al. 2008; Wu and David 2002). But after the introduction of the open systems approach to organizations in the 1960s, complexity has become one of the key concepts of the studies in the literature conducted on organizations (Anderson 1999). The theory and methodology derived from this paradigm was also utilized in the realm of social sciences (Wu and David 2002) and in the last two decades it has increasingly been used in studies of organizations (Swanson and Zhang 2011). Therefore, complexity itself is based on the general theory of systems by von Bertalanffy (1968). Nevertheless, listing more features for systems and putting emphasis on relationships and interdependencies between components of a system enriched general systems theory (GST) (Phelan 1999; Peltoniemi and Vuori 2004). Concerning this subject, Phelan (1999) asserts that complexity theory is different from systems theory in terms of the subject, technique, and epistemology. According to Peltoniemi (2006), there are three characteristics which have a close relationship with the key elements of complexity theory and they are: exploratory analysis, agent-based modeling, and complexity arising from the interaction of actors. According to Phelan (1999), the subject of complexity theory is exploratory. As a result, complexity theory provides theoretical lenses for analyzing complex interdependencies in a complex and pluralistic world i.e. a world in which determinism and reversibility have a limited use and can be applied only in a few cases while irreversibility and randomness are the rules. The techniques used in this theory are based on agent-based modeling and are based on the post positivist epistemology. Accordingly, complexity theory approach is an intermediate between

postmodernism and modernism; moreover, it is closer to postmodernism (McKelvey 2004) because unlike systems theory, that focuses on homology and similarity, complexity theory focuses on the distinction and differences which is the point of differentiation between modernism and postmodernism (Schindehutte and Morris 2009).

It is worth mentioning that some researchers even discussed a more general term called "complexity science", and has considered complexity theory as one of theoretical approaches categorized under this paradigm. In view of that, complexity science consists of a series of theoretical and conceptual tools (Walby 2007) and scientific approaches used to assess complex behaviors of physical and natural systems (Mathews et al. 1999). Each of these methods have different models or approaches for exploring the intended subject (Cohen 1999; McKelvey 2001). The complexity science undermines many of the existing underlying principles and beliefs which had long been used as basis for most often scientific research and traditional organizational theories (Mathews et al. 1999). It develops new beliefs regarding a particular type of system and equips itself with new methods that could improve research outcomes, as compared with traditional techniques (Schneider and Somers 2006). In fact, the complexity science in general and complexity theory in particular were developed because reductionist analyses could no longer analyze and explain the behavior of complex systems effectively (Anderson 1999) and the analysis methods used in many organizational and management studies are not suitable for the explanation of the complex phenomena (Mathews et al. 1999).

The complexity theory is primarily derived from approaches used in physics and mathematics. It attributes features to complex systems and that describe the complex behaviors not the system itself (Cadenasso et al. 2006). In fact, most of the research on complexity theory aimed to explain the behavior of system and interaction between the agents (Phelan 1999). Agent is a general term which is used for naming semi-autonomous phenomena that make up the complex system. They can be atoms, molecules, organisms, processes, people, groups, companies, industries, etc. (Benbya and McKelvey 2006).

But what does complexity exactly mean? What type of the system can be considered as a complex system? Simon (1962, p. 468) defines complex system as: "one made up of a large number of parts that have many interactions". Moreover, Axelrod and Cohen (1999, p. 7) assert that "a system in complex only when there are strong interactions among its elements, so that current events heavily influence the probabilities of many kinds of later events". American school of complexity science has defined the complex systems as "systems with many different parts which, by a rather mysterious process of self-organization, become more ordered and more informed than systems which operate in approximate thermodynamic equilibrium with their surroundings" (Peltoniemi and Vuori 2004, p. 9).

It can be said that complexity means a system with multiple elements and interdependent components (Simon 1962; Anderson 1999; Peltoniemi 2006) that are highly interactive and have complex relationships with each other (Peltoniemi and Vuori 2004) and their effectiveness and survival depends upon each other (Peltoniemi 2006). It could be argued that complexity is a relatively new approach

toward the systems composed of interdependent components and interacting agents (Benbya and McKelvey 2006) which has a focus on the interaction between the components (Frenken 2006). It tries to explain the process of directive interaction among the multiple elements and components within the system (Benbya and McKelvey 2006). However, in addition to the presence of multiple agents and interconnected and continuous interaction between them, some other features of a complex system have been identified by researchers which are outlined below.

In general, previous research has highlighted the most important characteristics of complexity theory, and particularly the characteristics describing complex systems as follows: 1. non-linear interactions between agents and components, 2. hierarchical nature of the system, 3. emergence, 4. co-evolutionary order creation and 5. self-organization.

- 1. Non-linear Interactions As implied by definitions of complexity and complex systems, interaction between system components is one of the key concepts of complexity and an underlying character of a complex system (Simon 1962; Anderson 1999; Phelan 1999; Fuller and Moran 2001; Peltoniemi and Vuori 2004; Peltoniemi 2006; Walby 2007; Lichtenstein et al. 2007; Schindehutte and Morris 2009; Anderson et al. 2012); this type of interaction leads to the formation of emerging and unpredictable patterns (ibid) and it steadily cause irregular patterns (Tan 2007). According to Phelan (1999), the interaction between actors and components in complex systems can explain the aggregate behavior of a system as a whole. In fact, such an aggregate behavior stems from activities and interactions of actors in the system. Based on Waldrop (1992), this is the distinguishing feature which makes a distinction between complexity approach and existing reductionist approaches, because reductionist approaches can explain the interaction of components but are incapable of explaining the system as a whole (Schindehutte and Morris 2009). For this reason, complexity science researchers believe that simple modeling (e.g., boxes and arrows causal models) no longer can be used for modeling complex systems with highly interactive and interconnected components (Anderson 1999). In general, complexity means that the agents of a system are dynamically linked to each other (Anderson et al. 2012). This dynamic interaction can affect many other attributes of a complex system that will be described below.
- 2. Hierarchical Nature Interactive behaviors of agents in a complex system over time may lead to the formation of networks which come in the form of meta-agents such as groups, hierarchies, structures, or complex processes of coordination (Benbya and McKelvey 2006). That is why Simon (1962) believes complexity is reflected in a hierarchical form. In other words, he considers the complex system as "being composed of subsystems that, in turn, have their own subsystems, and so on" (p. 468). As Simon pointed out, the relations between sub-systems of a complex system are much more complicated than formal organizational hierarchy. According to him, one of the representations of the complexity is the distinctive interactions between sub-systems on the one hand, and the interaction of components within a sub-system on the other hand. In such a system, the behavior of a sub-system in the short run is independent of the behavior of other components while in the long run it

will be dependent on them. Simon argues that in order to analyze the behavior of a complex system, it can be decomposed into its sub-systems and in fact the decomposable hierarchical structure of complex systems facilitates understanding and explaining complex systems and their components.

- 3. Emergence The concept of emergence is the focal point of complexity theory (Peltoniemi and Vuori 2004; Walby 2007). It is a concept that considers the relationship between various levels. In other words, higher levels are emerged from the activities of the lower levels of the system (Walby 2007). Accordingly, it is closely related to the hierarchical nature of the system that was mentioned earlier. This concept also rejects the reductionist approaches specific to natural and social sciences which try to reduce the systems and decompose them to the smallest components and units so that to analyze their behaviors. In other words, the concept of emergence provides a theoretical explanation for the association between system components without relying on a reductionist approach. According to Schindehutte and Morris (2009), emergence is not the result of the interaction between actors and components but, it occurs during the process of interaction. In fact, characteristics, qualities, patterns, or emergent structures are formed as a result of the interaction between individual elements (Holland 1998). The outcome of the emergence process is the creation of a new order together with self-organization.
- 4. Co-evolutionary Order Creation The emergence of order in a complex system is considered as a co-evolutionary process (Anderson 1999) that stems from nonlinear dynamics caused by interactions (McKelvey 2004) between heterogeneous agents and characterized by mutual dependence between them. In other words, an ordered pattern emerges from aggregate individual behaviors and interactions between them (Fuller et al. 2008) and without such interactions the formation of patterns cannot be expected (Anderson 1999). The interaction between the components of a system is a propulsion for the emergence of order (Lichtenstein et al. 2007). Therefore, a part of complexity theory is dealing with changing patterns of order and the formation of the new order (Fuller and Moran 2001; Anderson et al. 2012). This unpredictable non-linear behavior is also one of the key features of a complex system. It implies that a small change in one or two parts of a system could significantly affect the entire system (Anderson 1999; Walby 2007). According to Fuller et al. (2008), as compared with the mechanical linear approaches, nonlinear dynamic systems provide a better basis for theorizing the formation of order. Nonlinear interaction between actors is the main factor which results in the emergence of properties, unexpected dynamics, and self-organization of the system and eventually leads to complexity (Wu and David 2002). Thus, understanding it can help to explain the complexity of the system (Phelan 1999).

As mentioned earlier, the emergence of order is the result of a co-evolutionary process. Moreover, Simon (1962) also states that the structure of complex systems emerges within an evolutionary process over time. However, in a complex system we are also faced with the process of coevolution. According to Bateson (1979) coevolution can be defined with characteristics such as the emergence of interdependent species in a never-ending reciprocal cycle. Merry (1999, p. 272)

argues that "coevolution is the evolutionary mutual changes of species (or organizations) that interact with each other". According to Murmann (2003), coevolution takes place if and only if both of the entities have a significant causal impact on each other's ability to persist. Schneider and Somers (2006) contend that coevolution together with adaptation is one of the pillars of complexity theory. They argue that the two mentioned items act as the system agents that comply with external changes and evolve over time as a result of continuous interactions. In other words, this ability reflects the self-organization characteristics which are emerged as the result of interaction between agents, components, or sub-systems of a complex system. Accordingly, part of complexity science is focused on the study of and emerged structures or emergent adaptive behaviors and coevolution based self-organized behaviors in a complex system (Mathews et al. 1999; Benbya and McKelvey 2006).

5. Self-Organization Self-organization is associated with complex systems' ability to create a new order and integration. Many of the complexity science researchers share the Goldstein's definition of self-organization. Self-organization is a process by which new structures, patterns, and features emerge "without being externally imposed on the system" (Choi et al. 2001, p. 354). According to Kauffman (1993), the order emerged through such a process is called a spontaneous order. In this process, there is no internal or external guiding factor to set goals for the system or control actions; thus, events just happen spontaneously (Peltoniemi and Vuori 2004; Anderson 1999). Self-organization is the natural outcome of non-linear interactions between agents and their complex patterns of behavior (Anderson 1999). As described by Anderson (1999, p. 221), self-organization is a process where "pattern regularity emerges without the intervention of a central controller". According to Peltoniemi and Vuori (2004, p. 10), "self-organization is an ongoing process since it will never complete its final outcome". Unlike mechanistic theories that consume a central controller for a structure, complexity theory is based on this idea that order spontaneously emerges from interaction between organisms or agents (Benbya and McKelvey 2006).

In the following sections, we discuss the relevance of complexity theory for the entrepreneurial ecosystem research with an introductory review of the current state of entrepreneurship research using complexity approach.

### 4 Complexity in the Field of Entrepreneurship Research

Entrepreneurship is a field with old established links with the complexity science. The link between these two dates back to 1989 when Bygrave (1989) published his work on theorizing entrepreneurship through the application of chaos theory. Since then, the complexity science was utilized in entrepreneurship research in various forms. For instance, it was used for assessing the emergence of new ventures and explaining the dynamics of business (Lichtenstein 2011), examining the dynamics of

entrepreneurial actions of nascent entrepreneurs (Lichtenstein et al. 2007), explaining knowledge processes in industrial clusters (Lindsay 2005), as a new paradigm for different domains such as strategic entrepreneurship (Schindehutte and Morris 2009), and social entrepreneurship (Goldstein et al. 2008; Swanson and Zhang 2011). In addition, some researchers such as Fuller et al. (2008), Lichtenstein et al. (2007), and Lichtenstein (2011) investigated the application of complexity science and complexity theory to study entrepreneurship, expand the scope of research, and gain new insights about the entrepreneurship phenomenon.

There are several reasons for the significance and efficient application of complexity theory in entrepreneurship research. First of all, it can provide researchers with useful models for explaining the emergence of entrepreneurship (Lichtenstein 2011) and new venture creation, because complexity theory could equip them with numerous insights toward the creation of new businesses, organizational structures (Fuller et al. 2008) and behaviors. Second, this theory makes it possible to conduct research on multiple levels (Lichtenstein 2011) and it is a feature that is very important in gaining insight into the entrepreneurial process. In fact, complexity theory is a new way of thinking about systems composed of multiple agents, for instance businesses (Benbya and McKelvey 2006). Third, the key techniques of complexity theory i.e. the agent-based models (Phelan 1999; Peltoniemi 2006) are the only way to create empirically valid generalized statements about entrepreneurial dynamism (McKelvey 2004). According to him, such models make it possible to analyze complex causal dynamics with the goal of proposing a theory with higher levels of generalization and with greater legitimacy and practical credibility. Finally, the nature of present reductionist methodologies such as equilibrium models makes significant challenges to the dynamic nature of entrepreneurship (Fuller et al. 2008; Schindehutte and Morris 2009). That is why a significant portion of complexity research in the field of entrepreneurship aim to make an understanding of some of the nonlinear non-mechanical dynamics of entrepreneurial action (Lichtenstein 2011).

At the heart of both complexity and entrepreneurship remains the concept of "emergence" which has facilitated and inspired entrepreneurship research to focus on this concept. In view of According to Goldstein (1999, p. 49), the concept of emergence: "refers to the arising of novel and coherent structures, patterns, and properties in . . . complex systems". Entrepreneurship researchers have a focus on the emergence of new challenges (Bygrave 1989). As discussed in the previous section in detail, complexity researchers have a focus on the dynamics of emergence (Mathews et al. 1999; Peltoniemi and Vuori 2004; Walby 2007). In both of the fields, researchers study interactions and emergence of new phenomena at multiple levels of analysis (Lichtenstein 2011). Emergence in this state remains the key concept for theorizing in the realm of entrepreneurship. In this regard, emergence can be defined as the creation of novelty, new businesses, new products, new processes, or new organizational structures (Fuller et al. 2008).

A research that has an emphasis on the emergence tries to focus on what emerges and how and when it emerges (Fuller et al. 2008). Emergence as a characteristic of complexity theory leads to the creation of a new order; in other words, it leads to the formation of structures, processes, and characteristics realize within the system and

its levels (Lichtenstein 2011). New venture creation is one of the representations of creating a new order; this example reveals the effectiveness of complexity as a basis for entrepreneurship research (McKelvey 2004). Perhaps the concept of creative destruction which theorized by Schumpeter (1942), is a better example for creating a new order. Accordingly, entrepreneurship is seen as a temporary change that disrupts the economic balance, destroys the old order, and introduces a new economic order in the form of new businesses, new products, new processes, or organizational innovations (Fuller et al. 2008). In other words, creative destruction can be considered as a manifestation of emergence and order creation in the light of complexity theory, because entrepreneurship similar to complexity is associated with the creation of order (Swanson and Zhang 2011). Taking into account that creative destruction is non-equilibrium process, complexity theory as a non-equilibrium theory is the most consistent theory that justifies order creation via creative destruction (McKelvey 2004). As a result, entrepreneurship research is focused on the analysis of pre-equilibrium stage or on the creation of order; in such a condition, the science of complexity can provide a good theoretical lens for such research (McKelvey 2004; Breslin 2008) and to explain the emergence of order (Benbya and McKelvey 2006).

From another point of view, economic transition and entrepreneurial transformation can be considered as complex systems with a dynamic nature that are consisted of a network of agents interacting in a nonlinear way. The transition process at a certain point in time or over time can be explained via some of the basic principles of complexity science (in particular the principles of complexity theory) such as selforganization, emergence, and coevolution (Tan 2007). Mason (2007) uses the analogy of the business environment as a complex system and illustrates another form of the application of complexity in entrepreneurship research. He argues that business environment consists of a set of relationships between agents and stakeholders in the environment; the relationships may change due to people's decisions. These interactions together co-create an environment. So, using this analogy, we can understand some important structures of the complexity such as coevolution between companies and the environment. Business environment represent nonlinearity, emergence, and self-organization which all occur via the interaction of participants in the environment. Self-organization is the process of emerging order through a set of rules in an interconnected network of interactions.

To summarize the studies on entrepreneurship as a complex system, we can argue that these studies are mostly focused on the two dimensions of emergence and order creation and somewhat they have emphasized non-linear behaviors. However, when we perceive a system as complex, all the underlying principles of complexity are applicable because, they are closely related to each other and overshadow each other. In fact, in a complex system, non-linear interactions in a self-organized manner lead to the emergence of patterns, structures, and properties of the system and create order with a hierarchical nature. These interactions adapt themselves with environmental changes and thus ensure their continuation in a coevolution process, which in turn result in an evolution of the system over time. Therefore, it is very important to

consider all of these principles so that to become able to understand and explain the phenomena in complex systems.

In order to gain an insight into the entrepreneurship ecosystem as a complex system, in the next section we will discuss applying complexity theory to the study of entrepreneurship ecosystem. Moreover, we will describe some of the proposed paths for future research.

### 5 Complexity Theory and Entrepreneurship Ecosystem: Paths for Future Research

The presence of multiple actors with sophisticated interactive relationships, whose efficiency and survival are dependent on each other, is the key characteristics of a complex system (Peltoniemi 2006). This key feature can also be seen in an ecosystem (Peltoniemi and Vuori 2004). Therefore, ecosystem dynamics should be evaluated on the basis of complexity theory (Kay et al. 1999; Kay and Schneider 1994). In a more specific manner, entrepreneurship ecosystem in an interactive field which consists of actors and diverse interdependent factors (Kantis and Federico 2012; Mason and Brown 2014; Stam 2015) that emerge and evolve over time and provide a ground for the formation of new business ventures (Van de Van 1993; Vogel and Fischler-Strasak 2014). At first glance, the entrepreneurship ecosystem approach resembles systems theory which has a focus on the relationships between different elements within a specified boundary. However, based on the aforementioned evidences, the main origin of the ecosystem approach is the paradigm of complexity. It is the complexity theory which can explain the behavior of the entrepreneurship ecosystem in the form of a complex system. According to McKelvey (2004), none of the theoretical approaches of evolution and population ecology are suitable for exploring different aspects of entrepreneurial dynamisms such as the creation phenomenon which is the core of the entrepreneurship phenomenon. In contrast, the complexity theory which focuses on analyzing coevolution and order creation is more suitable for explaining the evolution of entrepreneurship because it simultaneously considers all the related factors and components; it is a feature that is critically needed for research in the field of entrepreneurship ecosystem, even when compared with entrepreneurship. Considering ecosystems as evolving complex systems increases our understanding of the principles of emergence, evolution, and their interdependence in a broader context (Peltoniemi and Vuori 2004). Nevertheless, when dealing with entrepreneurship ecosystem, we are faced with additional complexity that is caused by dynamics arising from the phenomenon of entrepreneurship on the one hand and ecosystem on the other hand. Thus, it seems necessary to explain entrepreneurship ecosystem as a complex system; moreover, we need to dismiss reductionist and mechanistic methods so that to understand the behavior and dynamics of the ecosystems (Kay and Schneider 1994). However, they believe that, when we say an ecosystem has a dynamic behavior not a deterministic one, it does not mean that their behavior is random or chaotic, but rather it means that we are faced with some degree of unpredictability. This unpredictability is the result of the nonlinearity of the interaction between components and the agents (Anderson 1999) in the ecosystem. Accordingly, in this study we adopted this idea and it is our basic rationale for choosing complexity theory (instead of the chaos theory) as the theoretical basis for investigating the ecosystem in general and entrepreneurship ecosystem in particular.

There is another key point to remember; compared to the natural systems, social systems have higher levels of complexity because social systems are composed of actors that do not respond to inputs or environmental stimuli in a simple and preset manner. In other words, in a social system we are faced with intelligent agents that can learn, interpret, make plans (Phelan 1999) and visualize and predict the future with some degree of accuracy (Peltoniemi 2006). Once again it highlights the need for dismissing reductionist and mechanistic approaches while explaining the behavior of social systems.

Now, we discuss the main objective of this paper, i.e. the identification of paths for future studies on entrepreneurship ecosystem in light of complexity theory. This approach can be adopted in research conducted in this field so that to increase the depth and richness of this field of study and promote the credit of empirical research. As Lewin (1952, p. 169) suggests, "there is nothing more practical than a good theory". Based on what we have discussed in section three, the most important underlying principles of complexity theory can be summarized as: nonlinear interactions between agents and components, hierarchical nature of the system, emergence, co-evolutionary order creation, and self-organization. Using these five underling principles, we try to elucidate the paths of future research on entrepreneurship ecosystem. In section four we briefly reviewed the research in the field of entrepreneurship with an emphasis on the utilization of complexity science; we summarized that the available studies as mostly focused on the two dimensions of emergence and order creation and somewhat they have emphasized non-linear behaviors. Based on the foregoing arguments, we suggest to consider entrepreneurship ecosystem-rather than entrepreneurship phenomenon- as a complex system. This highlights the importance of explaining and understanding the behavior and dynamics of ecosystems in the form of a complex system based on complexity theory. Accordingly, we require an accurate and detailed conceptualization of entrepreneurship ecosystem that goes beyond the general definitions and has an emphasis on the interaction between factors and actors in the course of business creation and entrepreneurship. It must provide a detailed description of the entrepreneurship ecosystem, because without such a conceptualization it is not possible to theorize and conduct empirical research in this field.

The starting point in understanding the behavior of ecosystems is to recognize the pattern of interactions between actors and components of the system. Obviously, presenting a list of components that make up the ecosystem alone cannot provide us with considerable insight about this ecosystem. We need to model the relationships between these components so that to analyze how the structure of the ecosystem is shaped or changed over time. Such modeling could reveal the formation of networks

within ecosystems i.e. networks of entrepreneurs, businesses, institutions, etc. or as Lichtenstein and McKelvey (2004) name the meta-agents. Modeling the main factors of complexity theory can help us to understand what and how the interactions and related factors influence their coevolution and survival over time. On the other hand, in order to analyze the interactions, we can consider the hierarchical nature of entrepreneurial ecosystem as a complex system. As Simon (1962) states, identification of sub-system, interactions between them, and distinguishing them from the interactions of components within the ecosystem make it possible to identify the structure of the ecosystem. Such a research is consistent with the kinds of research suggested by theorists of entrepreneurship, because they recommend conducting research at multiple levels of analysis (Davidsson and Wiklund 2001). This type of research is necessary because the entrepreneurship ecosystem research literature still lacks a reliable theoretical background on ecosystem as whole. This structure must not only identify the structural elements and components of ecosystems, but also theorize their interactions while considering the specific consequences of the creation of new business ventures.

Concerning the concept of emergence, we are faced with two dimensions: the emergence of new business ventures that have been already disused in previous studies and the emergence of the ecosystem. The latter discusses how an ecosystem emerges over time as a result of continuous interaction between agents and components; it also discusses how emergence leads to the creation of order through the formation of businesses (Lichtenstein 2011). Although the relationship between order creation and entrepreneurship phenomenon is conceptualized, we lack this conceptualization in the ecosystem. What does order creation mean for entrepreneurship ecosystem and how can it be achieved? So, it is necessary for future researchers to conceptualize emergence and order creation in an ecosystem and then examine how it occurs. Moreover, it is necessary to answer the following question: how is order creation linked with an ecosystem in general and with the creation of businesses at lower levels?

Another line of research can be focused on the coevolution of ecosystem; more exactly, we should try to find how an ecosystem structure is emerged and evolved as a result of continuous interaction between agents and the components of the ecosystem on the one hand and its adaptation to external changes and evolve over time on the other hand (Schneider and Somers 2006). Another path of future research is to conceptualize coevolution in ecosystems and how it occurs over time, taking into account the interactions between the components and agents and adapting to larger context. Future research can focus on finding how dynamic relationships between the components could result in ecosystem evolution over time while taking into account the importance of the context; it should answer how wider economic, political, cultural, and technological contexts surrounding an ecosystem could affect its performance over time. In fact, in order to explain the process of coevolution we need to conduct research and theorize the impact of ecosystem and its components on a wider context and evaluate the mutual impact of the context on the ecosystem while taking into account the effect of the variable of time.

As mentioned earlier, a complex system self-organization is the process of its formation and evolution over time without the internal and external controllers which occurs spontaneously (Peltoniemi and Vuori 2004). Future research can investigate how and why self-organization is realized in the entrepreneurship ecosystem as a result of nonlinear interactions between components of the complex system (Anderson 1999). It is necessary to consider self-organization as a base and investigate the role of formal and informal institutions in the formation or development of an ecosystem. It should be noted that, self-organization challenges the government's role in the entrepreneurship ecosystem. Some previous research such as Babson Entrepreneurship Ecosystem Project (Isenberg 2011) have emphasized on the role of government as one of the components of the ecosystem, while it is in contrast with the concept of self-organization and spontaneous activity which are seen in some successful ecosystems; this contradiction can be an area of future inquiry.

As one of the key features of the ecosystem, its birth and evolution is path-dependency (Peltoniemi and Vuori 2004) that represents its high sensitivity to initial conditions (Mason 2007), conducting case studies on well-known ecosystems (especially successful ecosystems such as Silicon Valley), conducting deep historical analysis, conducting comparative studies, and focusing on the two dimensions of time and context in future research can help to facilitate theorizing the aforementioned items and give a response to the questions regarding birth, growth, survival and death of entrepreneurial ecosystems. In these areas, the application of complexity theory can enrich the existing research and enhance our understanding of the ecosystems.

### 6 Conclusion

Theories used in the field of entrepreneurship often have a fragmented nature. As a result, instead of viewing entrepreneurship as a whole, researchers usually investigate its dimensions independently (Anderson et al. 2012) in an islandic manner. Obviously, it is not possible to understand a whole through taking an atomistic approach and analyzing it into smallest building blocks of a phenomenon (Fuller and Moran 2001). Such an approach is currently being pursued in entrepreneurship research. To address its theoretical gaps and deficiencies, recently, a group of the researchers emphasize on the application of a more holistic approach to the study of entrepreneurship. This emphasis comes from the complex nature of entrepreneurial activity and inability of linear thinking in providing a valid basis for the study of entrepreneurship phenomenon. For its significant contributions in many scientific disciplines (Frenken 2006), the complexity theory has been considered one of the theoretical grounds for the study of entrepreneurship in a small body of entrepreneurship research and this is while, regardless of its complex nature, the entrepreneurship ecosystem hasn't received an appropriate theoretical research attention using complexity theory.

This paper tried to propose complexity theory as a theoretical basis for the entrepreneurship ecosystem with the aim of promoting theory-based research in this field. As the theoretical contribution of this study, it suggested viewing the entrepreneurship ecosystems as a complex system and studying it with the complexity theory lens with the aim of identifying useful paths for future research. Accordingly, the authors determined and described the underlying principles of complexity theory and the rational of considering ecosystem a complex system then, presented the related paths for future research on entrepreneurial ecosystem using complexity theory. Going through the suggested paths may be difficult; however, we cannot gain insight and deep understanding of a complex phenomenon such as entrepreneurship ecosystem without undertaking such difficulties.

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### References

- Acs, Z. J., Estrin, S., Mickiewicz, T., & Szerb, L. (2014). The continued search for the Solow residual: The role of national entrepreneurial ecosystem. IZA Discussion Papers, No. 8652. Available from http://hdl.handle.net/10419/106598
- Acs, Z., Szerb, L., & Autio, E. (2015). The global entrepreneurship and development index. In Z. Acs, L. Szerb, & E. Autio (Eds.), *Global entrepreneurship and development index 2014* (pp. 39–64). Cham: Springer.
- Anderson, P. (1999). Perspective: Complexity theory and organization science. *Organization Science*, 10(3), 216–232.
- Anderson, A. R., Drakopoulou Dodd, S., & Jack, S. L. (2012). Entrepreneurship as connecting: Some implications for theorizing and practice. *Management Decision*, 50(5), 958–971.
- Arruda, C., Nogueira, V. S., & Costa, V. (2013). The Brazilian entrepreneurial ecosystem of startups: An analysis of entrepreneurship determinants in Brazil as seen from the OECD pillars. *Journal of Entrepreneurship and Innovation Management*, 2(3), 17–57.
- Axelrod, R., & Cohen, M. D. (1999). Harnessing complexity. New York: The Free Press.
- Bateson, G. (1979). Mind and nature: A necessary unity. New York: Dutton.
- Benbya, H., & McKelvey, B. (2006). Toward a complexity theory of information systems development. *Information Technology and People*, 19(1), 12–34.
- Bernardez, M., & Mead, M. (2009). The power of entrepreneurial ecosystems: Extracting boom from bust. *PII Review*, 2(2), 12–45.
- Breslin, D. (2008). A review of the evolutionary approach to the study of entrepreneurship. *International Journal of Management Reviews, 10*(4), 399–423.
- Bygrave, W. D. (1989). The entrepreneurship paradigm (II): Chaos and catastrophes among quantum jumps. *Entrepreneurship Theory and Practice*, 14(2), 7–30.
- Bygrave, W. D., & Hofer, C. W. (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16(2), 13–22.
- Cadenasso, M. L., Pickett, S. T. A., & Grove, J. M. (2006). Dimensions of ecosystem complexity: Heterogeneity, connectivity, and history. *Ecological Complexity*, *3*(1), 1–12.
- Choi, T. Y., Dooley, K. J., & Rungtusanatham, M. (2001). Supply networks and complex adaptive systems: Control versus emergence. *Journal of Operations Management*, 19(3), 351–366.
- Cohen, M. (1999). Commentary on the organization science special issue on complexity. Organization Science, 10(3), 373–376.

- Cohen, B. (2006). Sustainable valley entrepreneurial ecosystems. *Business Strategy and the Environment*, 15(1), 1–14.
- Davidsson, P., & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship: Theory and Practice*, 25(4), 81–100.
- Fetters, M., Greene, P. G., & Rice, M. P. (Eds.). (2010). The development of university-based entrepreneurship ecosystems: Global practices. Cheltenham: Edward Elgar.
- Foster, G., & Shimizu, C. (2013). Entrepreneurial ecosystems around the globe and company growth dynamics. Cologny: World Economic Forum.
- Frenken, K. (2006). Technological innovation and complexity theory. *Economics of Innovation and New Technology*, 15(2), 137–155.
- Fuerlinger, G., Fandl, U., & Funke, T. (2015). The role of the state in the entrepreneurship ecosystem: Insights from Germany. *Triple Helix*, 2(1), 3.
- Fuller, T., & Moran, P. (2001). Small enterprises as complex adaptive systems: A methodological question? *Entrepreneurship and Regional Development*, 13(1), 47–63.
- Fuller, T., Warren, L., & Argyle, P. (2008). Sustaining entrepreneurial business: A complexity perspective on processes that produce emergent practice. *International Entrepreneurship and Management Journal*, 4(1), 1–17.
- Goldstein, J. (1999). Emergence as a construct: History and issues. *Emergence*, 1(1), 49–72.
- Goldstein, J. A., Hazy, J. K., & Silberstang, J. (2008). Complexity and social entrepreneurship: A fortuitous meeting. Emergence: Complexity and Organization, 10(3), 9–24.
- Holland, J. H. (1998). Emergence: From chaos to order. Reading: Perseus.
- Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. [ebook] Bobson Global. Accessed February 1, 2017, from http://www.innovationamerica.us/images/stories/2011/The-entrepreneurship-ecosystem-strategy-for-economic-growth-policy-20110620183915.pdf
- Kantis, H., & Federico, J. (2012). Entrepreneurial ecosystems in Latin America: The role of policies. [ebook] Accessed November 18, 2016, from http://www.kauffman.org/~/media/kauffman\_org/z\_archive/resource/2012/5/irpr\_2012\_kantis.pdf
- Kauffman, S. A. (1993). The origins of order: Self-organization and selection in evolution. New York: Oxford University Press.
- Kay, J. J., & Schneider, E. (1994). Embracing complexity: The challenge of the ecosystem approach. *Alternatives Journal*, 20(3), 32.
- Kay, J. J., Regier, H. A., Boyle, M., & Francis, G. (1999). An ecosystem approach for sustainability: Addressing the challenge of complexity. *Futures*, 31(7), 721–742.
- Kline, C., Hao, H., Alderman, D., Kleckley, J. W., & Gray, S. (2014). A spatial analysis of tourism, entrepreneurship and the entrepreneurial ecosystem in North Carolina, USA. *Tourism Planning and Development*, 11(3), 305–316.
- Kshetri, N. (2014). Developing successful entrepreneurial ecosystems: Lessons from a comparison of an Asian tiger and a Baltic tiger. *Baltic Journal of Management*, 9(3), 330–356.
- Lewin, K. (1952). Field theory in social science: Selected theoretical papers by Kurt Lewin. London: Tavistock.
- Lichtenstein, B. (2011). Complexity science contributions to the field of entrepreneurship. In A. Peter, S. Maguire, & B. McKelvey (Eds.), *The Sage handbook of complexity and manage-ment* (pp. 471–793). London: Sage.
- Lichtenstein, B., & McKelvey, B. (2004). Complexity science and computational models of emergent order: What's there? What's missing? In *Academy of management annual meeting*. New Orleans: Academy of Management.
- Lichtenstein, B. B., Carter, N. M., Dooley, K. J., & Gartner, W. B. (2007). Complexity dynamics of nascent entrepreneurship. *Journal of Business Venturing*, 22(2), 236–261.
- Lindsay, V. J. (2005). The development of international industry clusters: A complexity theory approach. *Journal of International Entrepreneurship*, 3(1), 71–97.

- Manimala, M. J., Thomas, P., & Thomas, P. K. (2015). Perception of entrepreneurial ecosystem in India: Influence of industrial versus personal context of entrepreneurs. In R. La Rovere, L. de Magalhães Ozório, & L. de Jesus Melo (Eds.), *Entrepreneurship in BRICS* (pp. 105–123). Cham: Springer.
- Mason, R. B. (2007). The external environment's effect on management and strategy: A complexity theory approach. *Management Decision*, 45(1), 10–28.
- Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth oriented entrepreneurship. [ebook] (pp. 1–38). OECD. Accessed February 1, 2017, from http://www.regx.dk/fileadmin/user\_upload/regx/filer/Filer\_-\_Nyheder/2014/OECD\_Entrepreneurial-ecosystems.
- Mathews, K. M., White, M. C., & Long, R. G. (1999). Why study the complexity sciences in the social sciences? *Human Relations*, 52(4), 439–462.
- McKelvey, B. (2001). Energising order-creating networks of distributed intelligence: Improving the corporate brain. *International Journal of Innovation Management*, 5(02), 181–212.
- McKelvey, B. (2004). Toward a complexity science of entrepreneurship. *Journal of Business Venturing*, 19(3), 313–341.
- Merry, U. (1999). Organizational strategy on different landscapes: A new science approach. *Systemic Practice and Action Research*, 12(3), 257–278.
- Murmann, J. P. (2003). Knowledge and competitive advantage: The coevolution of firms, technology, and national institutions. Cambridge: Cambridge University Press.
- Neck, H. M., Meyer, G. D., Cohen, B., & Corbett, A. C. (2004). An entrepreneurial system view of new venture creation. *Journal of Small Business Management*, 42(2), 190–208.
- Peltoniemi, M. (2006). Preliminary theoretical framework for the study of business ecosystems. *Emergence-Mahwah-Lawrence Erlbaum*, 8(1), 10.
- Peltoniemi, M., & Vuori, E. (2004). Business ecosystem as the new approach to complex adaptive business environments. In *Frontiers of e-business research*. Tampere, Finland, pp. 267–281.
- Pereverzeva, E. (2015). Key elements of the entrepreneurial ecosystem facilitating the growth of ICT entrepreneurs in Russia. In R. La Rovere, L. de Magalhães Ozório, & L. de Jesus Melo (Eds.), *Entrepreneurship in BRICS* (pp. 65–90). Cham: Springer.
- Phelan, S. E. (1999). A note on the correspondence between complexity and systems theory. *Systemic Practice and Action Research*, 12(3), 237–246.
- Prahalad, C. K. (2005). The fortune at the bottom of the pyramid: Eradicating poverty through profits. *Vikalpa*, 30(2), 149–154.
- Schindehutte, M., & Morris, M. H. (2009). Advancing strategic entrepreneurship research: The role of complexity science in shifting the paradigm. *Entrepreneurship Theory and Practice*, 33(1), 241–276.
- Schneider, M., & Somers, M. (2006). Organizations as complex adaptive systems: Implications of complexity theory for leadership research. *The Leadership Quarterly*, 17(4), 351–365.
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York: George Allen & Unwin.
- Simon, H. A. (1962). The architecture of complexity. *Proceedings of the American Philosophical Society*, 106(6), 467–482.
- Stam, E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. *European Planning Studies*, 23(9), 1759–1769.
- Suresh, J., & Ramraj, R. (2012). Entrepreneurial ecosystem: Case study on the influence of environmental factors on entrepreneurial success. *European Journal of Business and Manage*ment, 4(16), 95–101.
- Swanson, L. A., & Zhang, D. D. (2011). Complexity theory and the social entrepreneurship zone. *Emergence: Complexity and Organization*, 13(3), 39–56.
- Tan, J. (2007). Phase transitions and emergence of entrepreneurship: The transformation of Chinese SOEs over time. *Journal of Business Venturing*, 22(1), 77–96.
- The Government of India, Planning Commission. (2012). Creating a vibrant entrepreneurial ecosystem in India. New Delhi, pp. 1–43.

- Van de Van, H. (1993). The development of an infrastructure for entrepreneurship. *Journal of Business venturing*, 8(3), 211–230.
- Vogel, P., & Fischler-Strasak, U. (2014). Fostering sustainable innovation within organizations. In C. Weidinger, F. Fischler, & R. Schmidpeter (Eds.), Sustainable entrepreneurship. CSR, sustainability, ethics and governance (pp. 191–205). Berlin: Springer.
- Von Bertalanffy, L. (1968). Organismic psychology and systems theory. Worchester: Clark University Press.
- Walby, S. (2007). Complexity theory, systems theory, and multiple intersecting social inequalities. *Philosophy of the Social Sciences*, *37*(4), 449–470.
- Waldrop, M. M. (1992). Complexity: The emerging science at the edge of order and chaos. London: Viking.
- Wu, J., & David, J. L. (2002). A spatially explicit hierarchical approach to modeling complex ecological systems: Theory and applications. *Ecological Modelling*, 153(1), 7–26.

# **Internationalization of European Small and Medium-Sized Companies**



Wiktor Bołkunow

Abstract The aim of this article was to analyze the process of internationalization of small and medium-sized European companies in international markets. The literature review shows that there are many theories of internationalization that have attempted to analyze the process and its results as in the times of globalization companies of all sizes view internationalization as a huge opportunity to develop. European Union has recently worked out programs for supporting the internationalization of European companies in order to strengthen their competitive position. Special focus has been put on small and medium-sized companies, as they play a very important role in the economic development in modern economies. The study's findings revealed that enhancing the internationalization of small and medium-sized enterprises has become a priority of the institutions of the European Union and of the governments of the EU Member States.

**Keywords** SMEs · Internationalization · Export · International trade · European Union

### 1 Introduction

In today's world, the process of globalization has become so widespread in the economic activity of businesses that an increasing number of business entities are characterized by internationalization of activities, *i.e.* relocation of production abroad, with differentiated development of export forms to international markets. According to a United Nations report, globalization and increased economic interdependence have accompanied—and facilitated—rapid economic growth in many countries and regions, helping world GDP grow from around 50 trillion USD in 2000 to 75 trillion USD in 2016 (United Nations Department of Economic and Social Affairs 2017). Companies of all sizes view internationalization as a huge

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opportunity for the development of production and sales of services, especially for small and medium-sized enterprises, which, thanks to internationalization processes, can increase economies of scale.

There is no uniform definition of internationalization in the literature, due to the intensification of globalization processes that have allowed capital flows to suspend economic transactions. Internationalization of a company, defined as taking all economic activity abroad of the country of origin of a company, requires the adoption of certain effective actions, management strategies necessary to adopt economic tools that promote a competitive advantage on the market.

The aim of this article is to analyze the process of internationalization of small and medium-sized European companies in international markets. The essence of internationalization is characterized in the first point, which allows various ways of disseminating the economic activity of companies on the international markets. The second point outlines how to strengthen the position of international European companies (with the focus on small and medium-sized enterprises) through the support of European Union policies. Finally, some conclusions will be presented.

### 2 The Essence of Internationalization in Business Activities

In the theories of internationalization, which are areas of research in the field of international business, the premises, forms and strategies of engaging companies in economic activity abroad have been explained. Internationalization of business activities requires huge capital expenditures, knowledge and entrepreneurship, and the benefits of internationalization are the result of entrepreneurial initiatives (Chang et al. 2017).

Various national governments, including the European Union institutions, provide information on export promotion, subsidies to the international fairs system, and thus allow companies to operate abroad. International exhibitions play a very important role as they enable companies to establish business relationships with foreign companies. Information provided to companies increases the competitiveness of European companies.

Piercy (1981) and Turnbull (1985) defined the process of internationalization as a transfer of a company's business outside its home state. An important role in the process of internationalization of the company is the marketing of the company, but with the corresponding features of the product. Internationalization depends on the policy of the exporter and the organization of export activities in the company to get rid of surplus production or often unwanted orders mainly on the domestic market. Piercy (1981) and Turnbull (1985) defined internationalization in two ways: first, as a transfer of a business outside the home state, and secondly as a process of increasing the company's engagement in international transactions (Welch and Luostarinen 1988). The process of internationalization of companies has been empirically tested (Welch and Luostarinen 1988), which shows that there is no broad way of capturing the potential paths of internationalization of firms.). This

form of internationalization, as the development of exports, was also promoted by Johanson and Vahlne (1977), who developed one of the most internationally known definitions of internationalization, called the Uppsala model. Blomstermo and Sharma (2003) note that this model is not suitable for explaining the internationalization of small and medium-sized enterprises.

Johanson and Vahlne (1977) defined internationalization as the acquisition by companies of domestic market knowledge of the world market, knowledge of specific markets. Internationalization is taking place in different phases over a long period of time. It is very important to learn and be involved in the process of entering the international market. Companies decide to internationalize only when the demand in the domestic market is already significantly lessened, as exports increase the sales of domestic companies. Domestic companies in foreign markets create sales networks and gain foreign trust—local business partners, gaining knowledge of distribution networks, habits in foreign markets takes time.

Johanson and Vahlne (1977) have written one of the first and most recognized literature studies on the theory of internationalization, pointing out that companies seeking knowledge of certain characteristics of a particular foreign market, in particular business climate, patterns of behavior, and consumer segmentation, can gain through export or take control of a foreign company or build a new business from scratch. An enterprise does not need internationalization at the beginning of its business life. In the initial stage of development companies are reluctant to opt for internationalization, because the domestic market is definitely a more predictable market, there is no exchange rate risk in domestic transactions, entrepreneurs do not have to worry about complex, more complicated forms of payment. The domestic market is easier to identify with marketing tools. The costs of supplies of goods to foreign markets, which are increasingly lower in the process of globalization, are also important. All workers of the companies participate in the learning process under the supervision of the management of the company, who must be aware of the need to acquire knowledge of the world market. Social capital is becoming increasingly important, trust between employees, personality traits can become a measure of the success of companies in third country markets. Companies often choose to process the internationalization of their operations by taking on the task of supplying the foreign market through increased exports, before engaging in foreign direct investment. This is due to the fact that companies acquire a specific knowledge on the foreign market, first of all in the export business, which entails higher variable costs but lower fixed costs. Interest in foreign direct investment occurs when access to the foreign market is limited by barriers to trade, so the importance of exports or a foreign market will be weak as an export platform for other geographical directions of the company.

Internationalization is not an easy process, the entrepreneur in the domestic market needs to assess the situation of opportunities for economic initiatives and business development in the international market, *i.e.* the exchange of products and services for the first time (Angelsberger et al. 2017). In studies on the premises of internationalization, it is recognized that knowledge of the characteristics of the market can only be achieved by gaining experience in foreign markets. Companies

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must have excellent knowledge that will enable them to operate on the international market. Companies can specialize in different types of intermediate products. Internationalization of companies does not decide the desire to profit from the financial market, but the strategic decision of the company allows for export growth (Hymer 1976). Enterprises that decide on internationalization must have extensive knowledge of intellectual property protection in the international market, increase brand awareness. The products are often offered on the international market at a better price than the partners in a given market who can come from all over the world.

The process of internationalization is changing over the long term. In the early stages of development, the company will be successful in the domestic market, market information, storage problems are much easier than in the foreign market. Only gaining experience in the activity allows for long-term expansion of the world market (Gorynia and Jankowska 2007). In the current phase of globalization, small and medium-sized enterprises are increasingly being used by the small and medium enterprises. In the early 1980s or 1990s, internationalization was mainly of multinational corporations (Lu and Beamish 2001).

Internationalization, defined as the strategy of companies starting their business outside the state (Welch and Luostarinen 1993), can take the form of both export and import, franchising, foreign direct investment. The company adopting the internationalization process decides to export directly, domestic companies make direct sales in the international markets. Exporting is related to knowledge of distribution networks, knowledge of international marketing instruments, pricing policies, forms of promotion, public relations, which greatly changes the way the company operates, the selection of human resources, the transformation of the whole strategy of the company. In case of selling abroad decisive will be the policy of the state opening the borders.

Firms may opt for indirect exports using the advantages of a third country intermediary and its market, which will create a kind of marketing and export platform. A strategy developed with the use of the third country market enables the supply of semi-finished products, raw materials needed to produce final products or services to other domestic companies that participate in the global value chain. One of the most widespread forms of internationalization is foreign direct investment (FDI)—outsourcing and other forms of capital agreements. Direct foreign investment is a very popular form of doing business abroad in the modern world. For companies investing abroad the market of another country is very uncertain, economically but also politically. A very large number of European companies use offshoring to become a global market. Offshoring processes require a change of purchasing and supply organization (PSO), whose knowledge requires high qualifications from managerial staff (Mugurusi and Bals 2017). Companies decide to relocate their production abroad, as there are often differences in factor prices in the global economy, particularly wages. The role of international competitiveness is greater when firms are in high R&D spending and employ a relatively large number of non-productive workers (Helpman et al. 2003).

Small and medium-sized enterprises may engage in foreign direct investment through greenfield investments, *i.e.* the kind of FDI in which the parent undertaking

establishes a new type of economic activity abroad build new operational facilities from the ground up, without infrastructure, undeveloped. Companies may use mergers and acquisitions, as well as by co-investing with other companies, such as joint ventures, with varying levels of asset control, often with a minority stake, as the controlling stake is defined in the company statutes. Such business activity is most likely for large companies with huge capital resources. Very often, domestic support for companies wishing to make a foreign investment is not enough because companies have little capital, so other factors are needed for internationalization such as franchise, product licensing.

According to Motta and Norman (1996) and Grossman et al. (2006), huge agricultural direct foreign investment is due to the fact that they are an export platform for companies. In the development strategy of companies, FDI plays an increasingly important role in increasing exports to other countries. Domestic policy should contribute to the involvement of companies in activities on foreign markets, and to supplement the impact of external factors. Domestic policy is very important at an early stage of internationalization of companies, especially small and medium-sized enterprises (Welch and Luostarinen 1993).

Companies move production to reduce production costs, such a form of FDI takes the form of vertical investments. Companies often divide the production chain into a variety of markets around the world. Research shows that small and medium-sized enterprises are decisive in most cases for direct and indirect exports, which complement each other in the manner in which they enter the foreign markets (Nguyen 2012). Companies can learn in their business process of internationalization by acquiring experience from the current form of export. The most important step in the process of internationalization is the systematic learning of the company's export business.

Other forms of internationalization, such as the contracting of unnamed and FDI, entail a rise in fixed costs, and the costs of covering these costs force the company to take advantage of the scale that small and medium-sized businesses may find difficult to obtain due to the company's limited resources. As a consequence, small and medium-sized enterprises after 2008, in the period of economic downturn in the world, have opted for a development strategy by increasing R&D, production and distribution in foreign markets. Companies are increasingly choosing to contract outsourcing, rather than forming subsidiaries in the process of foreign direct investment (Hollenstein 2005).

Companies are increasingly choosing to outsource contracts, rather than forming subsidiaries in the process of foreign direct investment flows, social capital plays a very important role in the process of internationalization of companies, thus enabling the survival of small and medium-sized enterprises in the global market (Hollenstein 2005). However, small and medium-sized companies, with their financial constraints compared to large companies, still accept exports as the most cost-effective form of internationalization (Westhead 2008). Only less than 3% of small and medium-sized companies based in the European Union have subsidiaries abroad. A significantly larger number of small and medium-sized enterprises have decided to export to third countries of the European Union (European Commission 2015).

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The essence			
of the			
problem	Concept of internationalization concept	Most important theories	
Economy	The most important feature of interna-	The theory of monopoly advantage	
international	tionalization is export based on com-	(Hymer 1976; Dunning 1980); The	
	parative advantage	theory of internalization (Buckley and	
		Casson 1976)	
Marketing	Internationalization means expansion	The Uppsala model (Johanson and	
international	into international markets within the	Vahlne 1977); Product life cycle theory	
	innovation product phase under condi-	(Vernon 1966), Innovative models	
	tions of export to countries with com-	(Bilkey and Tesar 1977).	
	parable GDP levels and mature product		
	phases, involving the flow of foreign		
	direct investment to other countries.		

Table 1 Classification of varied forms of internationalization

Source: Own study based on: Ocampo Figueroa et al. (2014)

Studies on the internationalization process in the post WWII period are based on a variety of theoretical assumptions. From the review of many concepts of internationalization, there is no unanimity in the definition of internationalization, which means that companies can work in a very different way on an international scale, benefiting economies of scale, increasing the output of domestic production outside the national market. Companies must have a thorough knowledge of international markets. Companies that choose to work abroad in a variety of formats must have extensive knowledge of innovations, technologies, payment methods, marketing rules (Welch and Luostarinen 1988). Over the last decades, attempts have been made to investigate the phenomenon of internationalization, as more and more time and the development of the globalization process have resulted in more and more views and views on the internationalization process (Ocampo Figueroa et al. 2014). Table 1 presents the different types of methodologies used to build an internationalization strategy for a company.

Another form of internationalization is direct trade, which is the whole of the international trade carried out by the manufacturer outside the country. Companies conduct business or production outside their home country (FDI). Merchants buy and sell on their own, purchased goods from the manufacturer are only repackaged and then sold under their own brand name. Agents bear the costs of marketing and promotion, but not potential losses associated with the lack of sales of goods. In the case of homogeneous goods such as cotton or wheat, specialized agents are marketed as mediators for a reasonable fee. The most comprehensive services are offered by export management companies that carry out marketing research on the foreign market, distribute, logistics, transport goods and services. Transport and forwarding of goods facilitates the carriage of goods to the port by providing services to the exporter.

Trade intermediaries play an important role in international trade. Intermediaries can help you gain market share, with relatively limited search costs. The company's use of intermediaries is, in a sense, the ultimate way to deal with a company that does

not deal with the market. Intermediaries have much more information about a given market than a company that uses a market entry strategy (Rubinstein and Wolinsky 1987). Intermediaries have much more information about a given market than a company that uses a market entry strategy (Wong and Wright 2011).

Just as the characteristics of the optimization problem may be related to the contracting customer's environment or to the market-level factors contracting problems can also influence the choice of export mode. Most of the small and medium-sized export trade transactions are conducted directly, and indirect trade also plays an important role in international trade, though currently literature is lacking in scientific research on the share of manufacturing companies in indirect exports.

The research conducted by Felbermayr and Jung (2011) and Ahn et al. (2011) shows that companies that decide on the internationalization process and take into account the foreign market in their business can be broken down according to their performance. This labor productivity will be determined by international cooperation. Only the best companies will be the process of internationalization. Of course, also companies with low labor productivity may choose to expand slightly to the international market. Mostly such companies are trying to help themselves in a variety of ways, it is understandable that small and medium-sized enterprises do not have the capital needed to employ specialized human capital who would have extremely high qualifications in managing the internationalization process, specialists in all marketing fields. For small businesses with little human resources, it is understandable that the company has to hire intermediaries to take advantage of market research, because otherwise it cannot draw up its entire business strategy on the international market.

Firms deciding on internationalization will be forced to devise strategies for entry into international markets. Typically, companies with small capital will choose to trade for the basis of internationalization, *i.e.*, export to foreign markets. This form of cooperation with the rest of the world is relatively simpler and less complicated. It requires the market to be identified and the competitive product stock of a diversified nature must be available, so it must be a diversified assortment. Although it may be the case that small-cap companies may choose to invest in foreign direct investment by investing overseas from scratch or purchasing a controlling stake, but in small capital ventures.

# 3 Internationalization of European Small and Medium-Sized Companies

The process of internationalization makes it possible to increase sales opportunities in the age of globalization on the world market and at the same time enables the competitiveness of European companies of all sizes. The process of internationalization has allowed European companies to increase their turnover. European companies that have opted to participate in the internationalization process have

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increased their employment as they have increased their demand for foreign goods. According to data from the European Commission, companies that exported their goods and services increased employment by 7%, and companies that made up the domestic market more than 3% (European Commission 2010, 2012).

As far as small and medium-sized enterprises in European Union are concerned, it should be stressed that they play an important role in the economy, as more than two thirds of jobs are created by such companies and they play an important role in the global supply chain. They continue, however, to face many barriers to the internationalization process, primarily having no working capital to finance their business. Small and medium-sized companies in raising finances in external sources are exposed to the huge opacity of the financial markets, which discourages investors from investing. Large companies in the EU are much more likely to participate in the capital market than small and medium-sized enterprises. European companies most often use the financing offered by banks, to a small extent participate in the capital market (Demary and Hornik 2016). It is also worth mentioning here that there is evidence that SMEs can improve performance by importing more foreign materials inputs and by utilizing foreign technologies from technologically advanced economies (Bilgin et al. 2012). If the (R&D-intensive) small firms were to be a driving force for a substantial structural change in the EU economy, from being driven by rather medium-tech sectors towards a high-tech based economy, they would need, however, substantial financial investments, which currently does not seem to be a realistic scenario (Voigt and Moncada-Paternò-Castello 2012).

This lack of capital is associated with a small base of qualified personnel in small and medium-sized enterprises. The European Commission recommends that small and medium-sized enterprises use clusters with specialized knowledge of demand in a given region of the world. Clusters enable greater worker mobility within the region and greater presence of venture capital investors, which is important for companies in the early stages of development looking for capital. Investments in venture capital companies have been most important in such EU countries as Austria, Hungary, South Korea, Slovakia. The biggest decline in interest in venture capital occurred in Belgium, the Czech Republic, Estonia, Slovenia and Sweden (Delearde and Schmerber 2017).

European companies use a variety of forms of internationalization. One of the forms of dissemination of European companies is the creation of clusters. The European Union recognizes clusters as the best way to internationalize European small and medium-sized enterprises. As European companies exit the global crisis, many use export as the best way to increase liquidity and survive on the market, especially from the peripheries of the European Union (Spain) (Altuzarra et al. 2016). The period of economic crisis in the world was particularly important for European companies wishing to increase exports, so export support programs in the European Union were important (Biesebroeck et al. 2016).

Studies from three European Union countries, France, Italy and Spain, show that there is no evidence of interdependence between trade through intermediaries and domestic (local) sales. On the other hand, there is a reciprocal relationship between direct exports and the flow of foreign direct investment.

Trade costs using direct export and FDI, when exporting indirectly, represent too large fixed costs or marginal costs. A small number of intermediate exporters make decisions on direct exports or FDI, either because of relatively low fixed costs in intermediate trade or because of low production capacity. The constant costs of modernization for more expensive means of internalization are high, and consequently, state interventionism is rather unsuccessful. At the same time, indirect exports do not seem very expensive, and thus speeding up contacts between manufacturers and intermediaries can be a relatively inexpensive solution and help you sell on foreign markets.

Establishing a manufacturing facility abroad and selling it on the local market allows the company to internationalize its activities and sell its products abroad (Helpman 1984). A great advantage of establishing a company abroad is greater control over the sales process. Direct sales may allow you to achieve the lowest marginal cost, provided that production cost differences do not exceed transport cost savings. Many companies try to mainly export, but foreign direct investment is also a very popular form of internationalization. Companies must make a number of decisions regarding foreign direct investment, in terms of horizontal and vertical specialization (Markusen 1984). Export companies are companies that are more efficient than domestic companies, which are less expensive to collect information about the world market and often need less educated staff (Helpman 2011). Companies that have opted for internationalization in the form of FDI represent between 5 and 10% Italy, 10.6% in Germany (Békés and Muraközy 2012).

23 million small and medium enterprises (SMEs) operating in the single European market make up more than two thirds of jobs in the private sector in the European Union. Over 25% of small and medium-sized enterprises in the European Union have been exporting to third countries. Small and medium-sized enterprises play an increasingly important role in the internationalization process. The share of SMEs in total EU exports to the markets of twelve countries, including China, Japan, Russia, India and Brazil, increased at the beginning of the second decade of the twenty first century from 39 to 62% (European Commission 2011).

As it has been already mentioned, small and medium-sized enterprises are the backbone of the economy of the entire European Union, since employment in this group of companies has exceeded 70% of total employment after 2008 (Parlament Europejski 2009). Small and medium-sized enterprises are, therefore, the addressee of the activities of the governments of EU Member States that have developed programs for the activation of internationalization processes among small and medium-sized enterprises.

The priority of the institutions of the European Union and of the governments of the EU Member States is to foster actions for the internationalization of small and medium-sized enterprises in third countries. The strategic aim of the European Union to support export policies for small and medium-sized enterprises in the global market is to increase the competitiveness of European companies in the global economy, leading to increased employment in the EU Member States. The EU's strategy for increasing the internationalization of small and medium-sized

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businesses was the EU's map of a range of Member State support programs to support the export activity of companies.

The European Commission has developed a program "mapping" and analyzing programs for supporting the internationalization of businesses presented by EU and EU governments, and on the markets of the major EU economic partners with huge GDP growth potential (European Commission 2011). The purpose of these actions in the Communication from the European Commission, designed to implement the tasks of the Europe 2020 strategy, is to provide SMEs with information on how to expand and increase their economic activity in third countries, and to create a coherent implementation of support for companies operating in foreign markets. As well as an increase in the profitability of product activation of companies. Mapping activities are expected to lead to a more rational and therefore more effective and effective system for promoting the internationalization of small and medium-sized enterprises in the EU.

Creation of an "International Business Portal", which will enable international action, in particular, by new Member States of the European Union. There was a wide-ranging thematic portal that included information on target international markets, in particular those third countries, which provided a potential outlet for European companies. The information portal has consolidated the information resources of the member countries of the virtual information portal addressed to those SMEs wishing to expand their business activities outside the EU. The website contains links to online contact points in each Member State of the European Union. The portal contains information that is translated into all EU languages. The portal has been integrated with portals at EU and national level, including the Market Access Database and the Export Helpdesk.

The most important tool for addressing these needs is the Market Access Teams (MAT) set up by the European Commission on selected international markets. The Market Access Teams program was set up by decision of the Council of the European Union in December 2008. MATs are already operating or are planning to start their operations in the following countries, identified as priority third markets for European SMEs: Algiers, Argentina, Brazil, Canada, Chile, Colombia, Egypt, Hong Kong, India, Indonesia, Israel, Japan, Kazakhstan, Malaysia, Mexico, Morocco, New Zealand, Nigeria, Norway, Peru, Philippines, Russia, Singapore, South Africa, Turkey, Ukraine, United States, Vietnam. Small and medium-sized companies seeking strategic partnerships with international partners seeking business partners to trade/sell in international trade and service provision, competing in the global economy, must seek strategic business cooperation with international partners. Promote clusters and networking that target the internationalization of small and medium-sized enterprises. In order to develop competitive global markets for products and services, SMEs need the right partners to support their innovative and marketing activities. Clusters, business networks and export consortia, representing groups of companies cooperating with each other in the framework of joint export strategies, can play a significant role in supporting the internationalization of SMEs.

The number of enterprises engaged in internationalization in export or import activities is decisive for the intensification of internationalization of enterprises. According to estimates, based on GUS data for 2013, 4.6% of companies operating in Poland (i.e. 81,900) are export-oriented in terms of products and only 0.9% (16,500) in Range of services. Similar estimates of the activity of companies operating in Poland in terms of imports indicate that the number and percentage of importers in Poland are significantly higher than for exporters. In 2013, the percentage of companies importing products was 7.6% (1,35,200) and services was 1.3% (22,800). Similarly as in the case of exports, the smallest percentage of importers was microfirms—5.8% of smallest companies import products from abroad and 0.6% of services. After the global economic crisis, the most internationalized industries are mining, manufacturing, automotive (European Commission 2015). A large number of companies in the European Union are not yet ready for internationalization.

### 4 Conclusions

Although the elaboration of a common, uniform definition of *internationalization* would be quite a challenge, as there have been created a significant number of theories on the nature and forms of internationalization, there seems to be a consensus concerning the importance of the phenomenon. Recently the processes of internationalization have taken on an increasing number of European companies due to the intensification of globalization and integration processes. Theories of internationalization explain the causes and the various forms of internationalization in the modern world economy, pointing to the process of internationalization of the business of companies. In Europe, companies of all sizes have increasingly been forced to take action on a broader geographic market due to the creation of an internal market in the European Union.

The European Union, as an important player in the international arena, strives to maintain its international economic policy in the forefront of the internationalization of European companies by taking action at the level of EU institutions that will enhance the knowledge of foreign markets for European companies. It has taken special steps to foster the companies that are perceived as quite vulnerable, and yet form the basis of the modern economy, i.e. small and medium-sized enterprises. SMEs create a majority of workplaces in the private sector in the European Union and their share in total EU exports has recently dynamically increased; they have to face, however, a lot of challenges while trying to expand their international activity, the most important being lack of funds and *know-how* on the right ways of doing business abroad. The policies recently designed by the European Union that are meant to help SMEs include increase their economic activity outside EU, e.g. by creation of an "International Business Portal" as well as supporting and promoting business networks (e.g. by setting up Market Access Teams) and clusters. To sum up, it should be stressed that the creation and implementation of these policies are a

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proof that enhancing the internationalization of small and medium-sized enterprises are currently a priority of the institutions of the European Union and of the governments of the EU Member States.

### References

- Ahn, J. B., Khandelwal, A., & Wei, S. J. (2011). The role of intermediaries in facilitating trade. *Journal of International Economics*, 84(1), 73–85.
- Altuzarra, A., Bustillo, R., & Rodríguez, C. (2016). Understanding export market success: Evidence from manufacturing firms. *Open Economies Review*, 27(1), 161–181.
- Angelsberger, M., Kraus, S., Mas-Tur, A., & Roig-Tierno, N. (2017). International opportunity recognition: An overview. *Journal of Small Business Strategy*, 27(1), 19–36.
- Békés, G., & Muraközy, B. (2012). *Internationalisation modes of European firms*. EFIGE Working paper 52.
- Biesebroeck, V. J., Konings, J., & Martincus, C. V. (2016). Did export promotion help firms weather the crisis? *Economic Policy*, 31(88), 653–702.
- Bilgin, M. H., Lau, M. C. K., & Demir, E. (2012). Technology transfer, finance channels, and SME performance: New evidence from developing countries. *The Singapore Economic Review*, 57 (03), 1250020.
- Bilkey, W. J., & Tesar, G. (1977). The export behavior of smaller Wisconsin manufacturing firms. *Journal of International Business Studies*, 8(1), 93–98.
- Blomstermo, A., & Sharma, D. D. (Eds.). (2003). Learning in the internationalisation process of firms. Cheltenham: Elgar.
- Buckley, P. J., & Casson, M. C. (1976). The future of the multinational enterprise. New York: Macmillan.
- Chang, M. Y. F., Jack, R., & Webster, M. C. (2017). Pre and post-entry resource needs for international entrepreneurs. *Journal of Management and Organization*, 23(2), 186–205.
- Delearde, P., & Schmerber L. (2017). *Policy brief: Role of regional networks and clusters as an instrument for internationalisation of SMEs.* Accessed March 30, 2018, from https://www.interregeurope.eu/fileadmin/user\_upload/plp\_uploads/2017-04-08\_TO3\_Policy\_brief\_Role\_of\_clusters\_and\_networks\_for\_internationalisation.pdf
- Demary, M., & Hornik, J. (2016). SME financing in the EU: Moving beyond one-size-fits-all. IW-Report · 11/2016. Köln: Institut der Deutschen Wirtschaft.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9–31.
- European Commission. (2011). Communication from the commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions. Brussels, 9.11.2011, COM(2011) 702 final.
- European Commission (EC). (2012). An overview of the main funding opportunities available to European SMEs. New January 2012. Brussels: DG Enterprise and Industry.
- European Commission (EC). (2015). *Internationalisation of European SMEs*. Brussels, 29/04/2015.
- European Commission (EC) and EIM Business and Policy Research. (2010). *Internationalisation of European SMEs*, final report. Brussels: DG Enterprise and Industry.
- Felbermayr, G., & Jung, B. (2011). Trade intermediation and the organization of exporters. *Review of International Economics*, 19(4), 634–648.
- Gorynia, M., & Jankowska, B. (2007). Teorie internacjonalizacji. (Theories of internationalization). Gospodarka Narodowa, 10, 21–44.
- Grossman, G. M., Helpman, E., & Szeidl, A. (2006). Optimal integration strategies for the multinational firm. *Journal of International Economics*, 70, 216–238.

- Helpman, E. (1984). A simple theory of international trade with multinational corporations. *Journal of Political Economy*, 92(3), 451–471.
- Helpman, E. (2011). Understanding global trade. Cambridge: Harvard University Press.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2003). Exports versus FDI with heterogeneous firms. *American Economic Review*, 94(1), 300–316.
- Hollenstein, H. (2005). Determinants of international activities: Are SMEs different? Small Business Economics, 24(5), 431–450.
- Hymer, S. H. (1976). The international operations of national firms: A study of direct foreign investment. Cambridge, MA: MIT Press.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm A model of knowledge development and increasing foreign market commitment. *Journal of International Business*, 8(1), 23–32.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6/7), 565–586.
- Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, 16(3–4), 205–226.
- Motta, M., & Norman, G. (1996). Does economic integration cause foreign direct investment. *International Economic Review*, 37(4), 757–783.
- Mugurusi, G., & Bals, L. A. (2017). Processual analysis of the purchasing and supply organization in transition: The impact of offshoring. *Operations Management Research*, 10(1–2), 64–83.
- Nguyen, D. X. (2012). Demand uncertainty: Exporting delays and exporting failures. *Journal of International Economics*, 86(2), 336–344.
- Ocampo Figueroa, E. L., Osuna, M. A. A., & Reynoso, C. F. (2014). Determinants of the internationalization of the firm: The accelerated model vs the sequential model. *The International Journal of Business and Finance Research*, 8(5), 81–93.
- Parlament Europejski (European Parliament). (2009). Sprawozdanie w sprawie wzmocnienia roli europejskich MŚP w handlu międzynarodowym (Report on enhancing the role of European SMEs in international trade) (2008/2205(INI). Komisja Handlu Międzynarodowego (Committee on International Trade).
- Piercy, N. F. (1981). Company internationalisation: Active and reactive exporting. *European Journal of Marketing*, 15(3), 24–40.
- Rubinstein, A., & Wolinsky, A. (1987). Middlemen. Quarterly Journal of Economics, 102(3), 581–594
- Turnbull, P. W. (1985, October). Internationalisation of the firm: A stages process or not? Paper presented at a conference on Export Expansion and Market Entry Modes, Dalhousie University, Halifax.
- United Nations Department of Economic and Social Affairs. (2017). New globalization report: Three mega-trends expected to impact our future. Accessed March 29, 2018, from https://www.un.org/development/desa/en/news/ecosoc/new-globalization-report.html
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*. 80(2), 190–207.
- Voigt, P., & Moncada-Paternò-Castello, P. (2012). Can fast growing R&D-intensive SMSs affect the economic structure of the EU economy?: A projection to the year 2020. Eurasian Business Review, 2(2), 96–128.
- Welch, L., & Luostarinen, R. (1988). Internationalization: Evolution of a concept. *Journal of General Management*, 14(2), 34–55.
- Welch, L., & Luostarinen, R. (1993). Inward-outward connections in internationalization. *Journal of International Marketing*, 1(1), 44–56.
- Westhead, P. (2008). International opportunity exploitation behaviour reported by "types" of firms relating to exporting experience. *Journal of Small Business and Enterprise Development*, 15(3), 431–456.
- Wong, Y. Y., & Wright, R. (2011). Buyers, sellers and middlemen: Variations in search theory. Working Paper 691, Federal Reserve Bank of Minneapolis Research Department October 2011.

## Toward a Better Understanding of SME: Three Different Policies for Three Types of SMEs



**Dmitri Pletnev and Ekaterina Nikolaeva** 

**Abstract** The importance of small and medium-sized enterprises in economic development is apparent to governments in almost every country. There are special agencies and programs developed at the national and international levels to foster these types of businesses. Practically every country has a policy framework for SME development. However, almost everywhere the developed policy is based on the assumption that SMEs are relatively homogenous. In the real economy, the concept of SME includes family shops and cafes along with factories with more than 100 workers. Such diverse economic entities have different values, different objective functions, and different expected results. For this reason, these universal recipes do not work for all groups of small and medium-sized enterprises. This article considers a new approach to creating a policy for small and medium-sized enterprises based on three different types of structure—small family business, small growing business, and medium-sized enterprises, each categorized by their features and their most important characteristics. The effective forms of state support have been defined for each form and a principle has been developed from this. All enterprises will have the potential to independently attribute themselves to the form that corresponds in the best way to their behavioral function and structure. The proposed cognitive frame can be used by national governments in different countries for improving SME development policy by endowing them with the ability for self-development.

**Keywords** Business success  $\cdot$  Small business  $\cdot$  Medium business  $\cdot$  Small and medium-sized enterprises  $\cdot$  SME policy

### 1 Introduction

In the economy of different countries, small and medium-sized enterprises play important roles. There are national economies in which they comprise up to 80% of GDP and employments (for example, Italy) while sometimes this share falls short of 20% (for example, Russia). The average share of small and medium-sized enterprises in the world's leading economies is about 50% of GDP. SMEs also create many job opportunities. At the same time, many people who do small business and work in small and medium-sized enterprises consider it the "second best" solution after large corporations, banks, or government institutions. Small business has become an alternative to unemployment, a way of survival rather than selfrealization. The situation with medium-sized enterprises is slightly better. When successful, such an enterprise occupies a certain niche and becomes the leader there. In Russia the share of taxes from small and medium-sized enterprises is much less than 5%. The tax burden on small and medium-sized enterprises remains high, and sometimes increases from year to year. This indicates the lack of a systematic vision and understanding of the role and place of small and medium-sized enterprises. These systematic problems do not allow SMEs to develop and prosper in a way that would in turn foster economic development. It is revealing that the comprehensive loss of small and medium-sized enterprises in Russia is half of the total profit of profitable SMEs. The share of unprofitable enterprises is only 20%. This indicates financial ailment in SME sector that indirectly confirms the conclusions made about the ineffectiveness of the existing policy. Instead of being a source of entrepreneurial activity and new business ideas, small and medium-sized enterprises are turning into a bottomless pit where billions of rubles of ruined enterprises disappear. The purpose of this paper is to develop and demonstrate the possibilities of using three different types of policy for three qualitatively dissimilar types of small and medium-sized enterprises. Each type is defined by several main characteristics; shared values, main agent groups, aims and expected results, key success factors, effective policy directions, motto, and social function.

### 2 Literature Review

At the level of legislation, a lot of attention is paid to the development of small and medium-sized enterprise in various countries. So, since 2009, there is a Small Business Act—a general framework for changing legislation that favors the development of small and medium-sized enterprises (the first results of its application in different countries are given in (COM 2011)) in the EU. This document identifies 10 principles that should guide the EU countries in implementing a policy on small and medium-sized enterprises (Promoting entrepreneurship, Second chance (for companies that facing financial difficulties), Think Small First, Responsive administrations, Access to public procurement, Access to finance, Single Market (helping

to do business in all EU countries), Skills and Innovation, Turning environmental challenges into opportunities, Support to internationalization). Not all of these principles can certainly be transferred to the practice in other countries; moreover, within the EU their implementation is slow and uneven, but thanks to this Act and similar documents the very idea of supporting small and medium-sized enterprise as an integral part of the ideology of public administration takes root in managerial Practices in the EU countries. The detailed review is given about the results of SME support policies in different EU countries (ESTAT 2017). It is clear from this study that the EU does not aspire to the self-sufficiency of small and medium-sized enterprises, on the contrary, sees progress in comprehensive support using administrative and financial mechanisms. Small and medium-sized enterprises become part of the "eurobureaucracy". Their existence in "Open Country" is almost impossible without support. Using the same criteria as the principles in the Act, SME Policy Index (SME PI 2016) is calculated for different groups of countries. The development degree of the environment for small and medium-sized enterprises is estimated on its basis.

In many developing countries, the National Policy Framework for Small Medium Enterprise Development has been approved and publicly available (for example, Ministry of Industry and Commerce of Sri Lanka 2017; Ministry of Industry and Trade of Tanzania 2003; Darroll 2012). These documents show and set national guidelines for the priority development of small and medium business. At the same time it is important to note that the SME policy does not distinguish different types of enterprises belonging to this category—neither by industry, nor by size, nor by goal orientation. It is a significant flaw, since the whole sector of small and medium business is not a homogeneous system, it is easy to distinguish qualitatively different from each other enterprises.

There is also an extensive support system for small and medium-sized enterprises in developed countries (Japan Small and Medium Enterprise Agency 2013). At the same time, special emphasis is being placed on expanding financial opportunities and tax breaks, as well as on "revitalization" of business activity in the sphere of services and trade. The Korean experience of SME development policy deserves a positive evaluation (Lee 2010; Chang 2017). It focuses on developing an ecosystem in which small and medium-sized enterprises would feel comfortable, rather than direct government regulation. An analysis of the Mexican experience in supporting small and medium-sized enterprises (Tan and Lopez-Acevedo 2007; Lopez-Acevedo and Tinajero 2010) shows that the results of such programs usually take time, and their effectiveness should be evaluated after a few years after the launch.

It was noted the significant heterogeneity of small and medium-sized enterprises in the 2nd OECD Conference of Ministers Responsible for Small And Medium-Sized Enterprises (SMEs), which was held in Istanbul, Turkey in 2004 (OECD 2004). In this case, heterogeneity is usually understood as a dimensional characteristic. However, beyond the statement of the fact of heterogeneity, there is no point in developing various policies for different types of SMEs. According to the authors of the report, the National government should integrate SMEs into the global economy, promote their internationalization. However, internationalization is one of the

elements of SME development and not the most important one. Important works in decent years related to small and medium-sized enterprise regulation and policy development are (Storey 2003; Arshed et al. 2014; Bennet 2014).

Amoroso et al. (2017) reveal the national and international features of the formation of knowledgeable competencies in small and medium-sized enterprises, which is the institutional factor of their success. It is proved that in the countries of Northern and Western Europe greater attention is paid to external knowledge obtained through specialized support funds, while in South and Eastern Europe entrepreneurs are more likely to rely on the economic effects of their internal know-how. In the study of Mitra and Jha (2015), the example of 11 Indian industries was empirically confirmed the thesis that the national institutional features, manifested in the action of norms, rules and traditions, are stronger than the purely economic trend to reduce employment in the context of increasing technological sophistication of small and medium enterprises. Chowdhury and Audretsch (2014) outlined the impact of the gender factor on the success of small and medium-sized enterprises. It is established that deeply rooted institutions of gender differences have a negative impact on the effectiveness of SMEs. Cirillo (2014) substantiated the positive impact of the institutionalization of innovations in the firm on the level of remuneration of highly skilled workers based on analysis of data on the Chilean economy. Ebrahimi and Mirbargkar (2017) noted the positive impact of the development of new intra-firm institutions of "green entrepreneurship" on the success of the SME enterprise. It is proved that the rooting of the principles of green economy helps firms in developing countries successfully cope with external shocks in conditions of turbulence.

Problems of modern tax regulation of small and medium-sized enterprises in Russia, including the features of various tax regimes, are described in detail in Mazur and Plakhov (2015). The role of small and medium-sized enterprises in the economies of different countries, both developed and developing, is overviewed in Vestifinance (2014). The detailed statistics on the performance of small and medium-sized enterprises are given in RCSME (2016).

#### 3 Results

Effective incentives for SMEs cannot be universal for all the diverse representatives of this group of enterprises. To manage small or medium-sized enterprise, it is necessary to have concept of its internal structure. Small (micro, family) business, medium-sized enterprises are the qualitatively heterogeneous mass of subjects of economic activity having different aims and resources to achieve them. It is necessary to legislatively divide the following forms of doing business: small family enterprises, small growing enterprises and medium-sized enterprises. The peculiarity of small family enterprises is the constancy of the types of activity and its scales, geographical localization in 1–2 places. For this type of SME, success is determined by the ability to survive and first of all by the resistance to crisis phenomena. Such

business and its distribution throughout the country is an excellent opportunity for the state to reduce unemployment, strengthen family values, ensure the filling of the Pension Fund of the Russian Federation and other off-budget funds by means of employees' contributions of such enterprises, and fill a niche in the economy that does not interest large and medium-sized companies. It cannot be considered as a source of tax revenues, otherwise such enterprises will not be able to achieve competitive advantages in quality and price in traditional industries (light and food industry, agriculture, hotel and restaurant services, etc.). Employees of such enterprises, in case of successful business, will be an important element of the consumer market, forming demand for final goods and services, as well as those used in their production. These enterprises can become an excellent business school for the younger generation and not push it away from doing business because of too tight regulation and excessive tax burden. It is also necessary to withdraw these enterprises from the strict control of inspection services with the simultaneous possibility of voluntary certification and the requirement to notify the consumer of its presence or absence. The model of a successful small family enterprise is shown in Fig. 1. The structural and logical model includes the formulation of the enterprise values (it is necessary to understand the internal forces driving this business), the main subjects (it is necessary to have an idea of the internal structure of the firm, the connections and possible contradictions of the subjects), the results (for a more accurate measurement of degree of the enterprise success), key success factors (including institutional structure dysfunctions according to Pletney (2013)), as well as the directions of state support that should become the most effective ones for this group of enterprises.

Small growing enterprises is the main driver of economic development; it is a source of entrepreneurial initiative, new ideas in industry, trade and production organization. Such business tends to constant growth and requires additional financial resources. These resources can be accumulated independently (without using profit, raising previously saved funds, as well as accumulating funds from several persons), or turn to lending structures (banks and extra-bank institutions that are currently poorly developed). The first option in terms of efficiency seems more preferable, since it does not entail the emergence of interest burden and the principal of the loan, distracting the developing enterprise from the necessary resources. For this reason, it is necessary to refuse the practice of taxation of small developing enterprises in the first 5 years of their operation with the subsequent granting of tax holidays as a bonus for stable work.

The awarding of small growing enterprises that exist and operate long enough (10 years or more) can consist in granting tax holidays on the 11th, 14th, 17th and further years of active work and active payment of all due taxes. This will create incentives for the development of a permanent activity, for careful attitude to the created business, for greater transparency and a higher level of trust. An obligatory condition for the provision of such holidays is the investment of all earned profit into the business, the rejection of the consumption of profit.

Small growing enterprises are a "factory" of new business ideas and business solutions, this is the place where new products and technologies are born, from such

Values	Agent gro	ups		Aims and expected results		
1. Family values (paternalism, succession) 2. Local patriotism 3. Respect from neighbors and society 4. Personal welfare 5. Interesting work	1. Found 2. "Core" of the far outside; A to friends! 3. "Borde some dist bear more 4. Extern customers	Stable place in the market     Predictable sales     Growth of the welfare of the «Core»				
-						
Key success factors  1. Professional and personal characteristics of employees 2. Trust in relations with suppliers and customers  Dysfunction of the institutional structure:  Institution of force  Institution of assistance						
Effective policy directions			Motto:	Social Function:		
Minimization of control, inspections,     Transition to voluntary certification, attestation, etc.     Minimization taxes, up to zero     Promoting a positive image in the education system, public projects			«laisser faire» (let them do)	Employment, Income generation		

Developed by the authors

Fig. 1 Model of successful small family enterprises

enterprises can emerge future Microsoft, Google, Facebook. Their growth is a source of many branches of economy around such enterprises. The model of successful small growing enterprise is shown in Fig. 2.

Medium business is, as a rule, one of two types of enterprise: (1) a small business that continues to grow, which should ideally become large, that is, a growing, and sometimes fast-growing enterprises; (2) an enterprise that found its niche and is satisfied with its current position in the economy, performing a certain economic function and not trying to bite more than one can chew (this is the bulk of trade and manufacturing enterprises positioning themselves as "medium business").

The existing examples of successful development of SMEs in the world practice are the "hidden champions" in Germany, "gazelles" around the world. They show

Values Agent g		roups		Aims and expected results
Entrepreneurship values     Growth and development of the enterprise     Conquest (market, territories)     Self-approval through innovation (including organizational)	1. The owner-leader (or group) is the source of power, the "institutional entrepreneur", the possessor of "emotional intelligence" and the charisma that reproduces the style of behavior in the firm  2. "Core 1" - quasi-permanent workers who have important for the firm professional and personal competencies, having a close connection with the leader and translating his ideas to the rest  3. "Core 2" - important professionals, who do not necessarily come for a long time, but important to the development  4. "Border" - workers who are easily can be replaced by others, without loss of quality of work and products  5. Stakeholders - regular suppliers, regular customers (including network retailers, state and municipal institutions), banks, local authorities			tional 2. Growth 3. Expansion 4. Transition to the medium businesses as to sarily d by mers
Key success factors  1. Professional competencies of the head and employees  2. Degree of involvement of the manager  3. Personality of the leader, his charisma and "emotional intelligence"  4. Good relationships with large customers  5. Good dynamic capabilities		Dysfunction of the institutional structure:  Institution of force  Institution of self-interest		
Effective policy directions			Motto:	Social Function:
Initial and periodic tax holidays     Simplify control, where possible - transfer it to public certification     Legitimization of enterprise networks			«let them grow»	Innovations, New niche development, School for Entrepreneurs

Developed by the authors

Fig. 2 Model of successful small growing enterprises

that it is possible to succeed and compete on equal terms with large companies and sometimes the result of such competition will be in favor of medium-sized company.

This type of firm, grown out of small and medium-sized enterprises and retained many of its characteristics, was studied in detail by Simon (1996, 2009). He refers to them the firms that are small in size and non-public in the nature of activity, yet for a long time occupying stable positions in the markets and stably, almost without hesitation, generating profit. Such firms have become widespread in Germany where the need to rely on internal resources and moderate bank financing predetermined by corporate legislation has been combined with natural German punctuality and thoroughness.

As a result, many niches of the European economy, especially the b2b sector, were occupied by the German "hidden champions". Simon (1996) counted more than 500 such firms in different industries. All of them are united by a minimum of expenses on public relations and minimal public fame, combined with the first or second position in the world market, or the first position in Europe. The combination of these conditions is artificially supplemented by a restriction on the volume of sales—no more than 1 billion dollars a year.

The main success factors of such companies are: the quality and profitability of the product for the consumer, orientation to the world or European market (export domination), concentration on a narrow niche, "proximity to the client", innovation, industrial autonomy, strong "mobilizing" competitor, corporate culture, the team principle of work, the personality of the head. The target orientation of such companies is usually: long-term profit, stable sales and growth in market share.

Examples of the "hidden champion" firms are various: Kärcher (high pressure washing equipment), Stihl (gas chainsaws), Krones (labeling machines), Heidenhein (length and angle measuring devices), Webasto (automotive climate control), Suspa (shock absorbers for washing machines), Hahn (museum display cases), Tetra (fish food), Winterhalter (restaurant dishwashers), CleanConcept (non-contact hygienic toilets), Tigra (cutting tools for woodworking machines). And this form of corporation is not a purely German "invention", but really an effective universal form of the corporation. The example of "hidden champions" shows that they are successful as corporations, the share of their internal subjects is not only and not so much large corporations as those who could find their place and concentrate on it. It is possible to talk about the existence of the "second best" solution for corporations planning the direction of their development. The first and best, some kind of "ideal" of the corporation is its forms, which ensure domination and maximum power. In economic literature there is also an active study of the phenomenon of "gazelles" (Yudanov 2010, 2012; Barkhatov and Pletnev 2015)—fast-growing enterprises that create the lion's share of workplaces in the economy and, as a rule, starting their way as small enterprises, but the main and most interesting part of the way passing as medium business (Fig. 3).

The criterion of referring to a certain form of business should be the principle of self-identification without providing any supporting documents. The only requirement for such companies is maximum availability for public control, transparency of activity (number of employees, scale of activity, awards and censure, business scheme (large suppliers and customers)). In our opinion, this is quite a reasonable "price" for substantial tax advantages and easing in control. An important consequence of this step should be an increase in the level of trust in the economy as a whole and between small and medium-sized enterprise on the one hand, and society on the other. In Russia, many enterprises formally meet the definition of small and medium-sized enterprises are actually virtual subjects providing auxiliary economic functions alongside of large enterprises. Such enterprises will hardly agree to become information-transparent and provide detailed information about their activity "in plain view." Such enterprises cannot be attributed to any of the abovementioned groups and it is not possible to provide appropriate benefits.

Values	expe				Aims expected results	and
1. Corporate Values 2. Leadership 3. Quality in everything (products, business processes) 4. Development 5. Regulation of activities, the construction of the System	1. The owners-managers are guarantors of stability and development, the supreme arbiter and controller 2. "Core 1" (Management) - determines all business processes and interaction of units, determines the organizational development of the company 3. "Core 2" (Qualified personnel) - the source of implementation and improvement of technologies, innovations, determine the technological development of the company 4. Unstable employees - a flexible part of the staff, changing with the change in the need for it 5. Partners (participants of the entrenched network) - interaction on a partially reciprocal basis, on trust 6. Investors (including crowd-bonding, without intermediaries				of	
Koy success fact		community and authorities				
development of			tion of	et )		
Effective policy directions     Legitimization of enterprise networks     Tax holidays for long and actively working enterprises     Forming a positive image of medium-sized companies, that			Motto: «Trust as a reward for social	Next corpora Monopo	oly Econor	of No- nics,
create good workplaces 4. Involvement stable medium-sized companies in the large state projects			responsibi lity»	Dismiss governr support	ment ill	the legal

Developed by the authors

Fig. 3 Model of successful medium-sized enterprise

#### 4 Conclusions

Who needs small and medium-sized business? Perhaps, it just objectively exists and works, and the main task of the state is not to hinder its development? Judging by the actions taken by various government bodies, there is no uniform understanding in the world of the role and place of small and medium-sized enterprises in the economy. The conducted research showed that the success of small and medium-sized enterprises in a very small number of cases is determined by the provided state support (unless it is a question of success of specific enterprises through the focused

support, including the use of personal relations, but a question of success of the whole sphere of SMEs). Support mechanisms do not work. There is no definite critical mass of successful entrepreneurs, whose example and experience would help attract the most talented young people and specialists to the sphere of management of small and medium-sized enterprises. The work in small or medium-sized enterprises is far not so popular as in large corporations, banks and government authorities. The combination of high risks and low profitability of small and medium-sized enterprises leaves there only those subjects (managers and employees) who (a) have not found themselves in big business, banking sector or public service (due to professional and personal qualities); (b) have an individual high risk appetite, an interest in entrepreneurship, an innovative nature; (c) are prone to a conservative attitude to their professional activity, and are not ready to change it for the sake of the conjuncture. These people, under any conditions, will be engaged in the chosen business as best they can. They do not need support (financial, infrastructure, etc.) they have learned to cope with the problems and challenges of the economy on their own. Moreover, it hinders them, because the legislative and executive authorities from the best of motives strive to implement new forms of support, launch programs and projects. As a result, an important problem in this area is frequently changing legislation distorting the established institutional field. It demotivates certain subjects, creates unreasonable advantages for others. An entrepreneur who previously was a leader in the local market suddenly has a powerful competitor who is better informed about the possibilities of state support programs and gets a lot of advantages from this. And the entrepreneur, who previously was successful and performed an important public function, is forced to reduce sales or even leave the market.

If the state is interested in rapid development of any sphere of small and mediumsized enterprise (IT, nanotechnology, machine and instrument engineering, agriculture) then the programs in this area should be simplest and available to their mass user (entrepreneurs). It is necessary to understand that strengthening of control or expert inspections in this sphere will lead to the refusal in participation in the projects of those managers who are really entrepreneurs—they rarely can guarantee the result, and even predict it with a high probability. Entrepreneurship in the small and medium business is resource-oriented, that is, its objective function and actual results largely depend on the resources the firm possesses, and which appear in the course of the project implementation during the year. The taken financial obligations in the form of grants or targeted subsidies limit the freedom of entrepreneurship; drive their activity into a pre-determined framework that can be quite obsolete. In this case it is useful to recall and use one of the laws of dialectics—the transformation of quantitative into qualitative changes. Increase in the state support in the right direction will help accumulate a critical mass of resources that will inevitably give a positive result, perhaps not this year, but for sure.

The thinking based on the need of value creation, that is, value added at their enterprises shall be introduced into the minds of entrepreneurs. Entrepreneurs need to understand their place in the value chain, as well as the place of their counterparties and competitors, in order to get a better understanding of their own and their competitive advantages and risks. The successful small and medium-sized

enterprises most often increase the share of value added in their revenues and find the most favorable place in the value creation chain. However, it usually happens intuitively, without realizing this fact. It is necessary to make value added and the desire for its increasing a part of the business culture of the managers of small and medium-sized enterprises.

#### References

- Amoroso, S., Audretsch, D. B., & Link, A. N. (2017). Sources of knowledge used by entrepreneurial firms in the European high-tech sector. *Eurasian Business Review*, 8, 55–70.
- Arshed, N., Carter, S., & Mason, C. (2014). The ineffectiveness of entrepreneurship policy: Is policy formulation to blame? *Small Business Economics*, 43(3), 639–659.
- Barkhatov, V. I., & Pletnev, D. A. (2015). Uspeshnost' bystrorastushchikh predpriyatiy srednego biznesa v Rossii [Business success of fast-growing medium-sized enterprises in Russia]. Vestnik PNIPU. Socialnye I Economicheskie Nauki, 4, 65–81.
- Bennett, R. (2014). Entrepreneurship, small business and public policy: Evolution and revolution. Abingdon: Routledge.
- Chang, W. (2017). An empirical study on the effects of public procurement on the productivity and survivability of SMEs: Case of the Korean mining and manufacturing sectors (February 2017). *KDI Journal of Economic Policy*, 39(1), 1–18.
- Chowdhury, F., & Audretsch, D. B. (2014). Institution as looting apparatus: Impact of gender equality and institutions on female entrepreneurship. *Eurasian Business Review*, 4, 207–225.
- Cirillo, V. (2014). Patterns of innovation and wage distribution. Do "innovative firms" pay higher wages? Evidence from Chile. *Eurasian Business Review*, 4, 181–206.
- COM. (2011). Communication from the Commission to the European Parliament, the Council, Economic and Social Committee and the Committee of the Regions Review of the "Small Business Act" for Europe [online]. Accessed August 10, 2017, from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0078
- Darroll, C. (2012). Micro, small and medium enterprises (MSME) policy strategy for the Republic of Malawi [online]. Accessed August 10, 2017, from https://info.undp.org/docs/pdc/Docu ments/MWI/MALAWI%20MSME%20POLICY%20AND%20STRATEGY%20FINAL% 20DRAFT%20AUGUST%202012.pdf
- Ebrahimi, P., & Mirbargkar, S. M. (2017). Green entrepreneurship and green innovation for SME development in market turbulence. *Eurasian Business Review*, 7, 203–228.
- ESTAT. (2017). Assessment of the effectiveness of the EU SME policies 2007–2015, ESTAT and European Economic and Social Committee [online]. Accessed August 10, 2017, from http://www.eesc.europa.eu/resources/docs/qe-02-17-762-en-n.pdf
- Japan Small and Medium Enterprise Agency. (2013). Japan's policy on small and medium enterprises (SMEs) and micro enterprises [online]. Accessed August 10, 2017, from http:// www.chusho.meti.go.jp/sme\_english/outline/04/20131007.pdf
- Lee, J. H. (2010). SME policies of Korea (presentation) [online]. Accessed August 10, 2017, from http://www.oecdkorea.org/Download/Governance/Manager/General/File/201007/Dr.Jae% 20Hoon%20Lee.ppt.pdf
- Lopez-Acevedo, G., & Tinajero, M. (2010, January 1). Mexico: Impact evaluation of SME programs using panel firm data. World Bank Policy Research Working Paper No. 5186 [online]. Accessed August 1, 2017, from https://ssrn.com/abstract=1543045
- Mazur, L., & Plakhov, A. (2015). Nalogooblozheniye Malogo Biznesa I Dokhody Byudzhetnoy Sistemy RF [Taxation of Small Business and Revenues of the Budgetary System of Russia]. Vestnik OrelGIET, 32, 154–159.

- Ministry of Industry and Commerce of Sri Lanka. (2017). *National policy framework for small medium enterprise (SME) development* [online]. Accessed August 10, 2017, from http://www.industry.gov.lk/web/images/pdf/framew\_eng.pdf
- Ministry of Industry and Trade of Tanzania. (2003). *Small and medium enterprise development policy* [online]. Accessed August 10, 2017, from http://www.mit.go.tz/uploads/files/Tanzania% 20SME%20Policy.pdf
- Mitra, A., & Jha, A. K. (2015). Innovation and employment: A firm level study of Indian industries. *Eurasian Business Review*, 5, 45–71.
- OECD. (2004). Promoting SMEs for development, organisation for economic co-operation and development [online]. Accessed August 10, 2017, from http://www.oecd.org/cfe/smes/31919278.pdf
- Pletnev, D. A. (2013). Sistemno-Institutsional'naya Teoriya Korporatsii: k Razrabotke Novoy Kontseptsii [The Systematic Institutional Theory of the Corporation: Towards a New Conceptualization]. *Ekonomicheskaya Nauka Sovremennoy Rossii*, 4(63), 7–18.
- RCSME. (2016). Statistika MSP [SME statistics] [online]. Accessed August 1, 2017, from http://rcsme.ru/ru/statistics
- Simon, H. (1996). *Hidden champions: Lessons from 500 of the world's best unknown companies*. Boston, MA: Harvard Business School Press.
- Simon, H. (2009). Hidden champions of the twenty-first century. New York, NY: Springer.
- SME PI. (2016). Eastern partner countries 2016: Assessing the implementation of the Small Business Act for Europe. Paris: OECD.
- Storey, D. J. (2003). Entrepreneurship, small and medium sized enterprises and public policies. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research* (pp. 473–511). Dordrecht: Kluwer.
- Tan, H., & Lopez-Acevedo, G. (2007). Evaluating Mexico's small and medium enterprise programs. Washington, DC: World Bank.
- Vestifinance. (2014). Semeinyi biznes v Rossii i v mire: v chem raznitca? [Family business in Russia and in the world: What the difference?] [online]. Accessed May 18, 2017, from http://www.vestifinance.ru/articles/49546
- Yudanov, A. Y. (2010). Pokoritely golubykh okeanov (Firmy-gazelly v Rossii) [The conquerors of the «blue oceans» («gazelles» in Russia)]. *Sovremennaya Konkurentsia*, 2(20), 27–48.
- Yudanov, A. Y. (2012). Ne kak vse: ob upravlencheskoy praktike firm-gazelley [Not as all: The governmental practice of the Gazelles]. *Mir Novoy Ekonomiki*, 3–4, 6–12.

# Supporting Enterprise Innovation by Cooperation with Business Environment Institutions in Poland and Belarus



Andrzej Daniluk

**Abstract** Effective implementation of innovation in the context of economy globalization requires entering into cooperative relationships with other companies and market participants. Business environment institutions (BEI) constitute one of the most important elements of efficient innovation system. They support companies and facilitate the flow of knowledge and technology between science and businesses. There are not many research on cooperation between enterprises and BEI carried out in regional context, especially on cooperation between Polish and Belarusian companies. The research problem refers to a small impact of cooperation between enterprises and BEI on the possibility of effective implementation and supporting innovation development in Podlasie region in Poland. This article presents the results of studies which took into account factors that affect the level of cooperation between BEI and companies representing the leading branches in north-eastern Poland and in Belarus. The methods of critical analysis of the literature and statistical analysis of data have been used. It was found out that the existing forms of mutual cooperation between businesses and BEI are not used effectively enough to support innovation. In order to increase the innovative activity of enterprises it may be necessary to develop cross-border cooperation, inspired by the cooperation programs developed by local authorities.

 $\textbf{Keywords} \ \ Cooperation \cdot Innovation \cdot Competitiveness \cdot Business \ environment \\ institutions \cdot Poland \cdot Belarus$ 

## 1 Introduction

Competition is a driving force of technological progress that influences development of regions and states. The increase in competition has led to increased interest in relationships in which competition is intertwined with relationships based on

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partnerships. The idea of benefiting from the collective actions of economic actors is increasingly common. It can be assumed that in modern economy cooperation of enterprises with business environment institutions can be a way of increasing innovativeness of enterprises and regions.

Companies are not able to implement innovations themselves in conditions of globalization and increased competition. Implementation of innovative projects for new technologies, products and services development requires establishment of contacts with a number of external partners i.e. other companies and different market participants. Promoting innovative projects creates a market for a new type of service and develops economic environment that supports entrepreneurs. This includes creation and development of specialized business environment institutions (BEI). These institutions are therefore an important element of an effective system for supporting the development of innovation. In this context, the role of international links with business environment institutions is also important. It applies in particular to border regions like Podlasie in Poland, which is an element of the Baltic Sea Region. Podlasie is one of the four regions in Poland located along the external border of the European Union. The ability of its cooperation and networking will be decisive for opportunities and directions of its development. Strengthening the competitive potential of the outermost regions is possible by growth through external factors, in particular through the development of cross-border cooperation (Fratesi 2015; Smetkowski et al. 2017). Formation of various forms of inter-organizational linkages has a positive impact on increasing the level of economic development of a region. An extensive network of links between business entities is one of the most important factors of their competitiveness, also international (Leigh and Blakely 2013: Daniluk 2017).

Researches on business environment institutions in different regions are characterized by considerable variations in scale and scope. Factors affecting the tendency to cooperate in central regions are not always relevant to cross border regions. There is no study on the impact of business collaboration with business environment institutions on development of innovation. This also applies to Podlaskie voivodeship, which is one of the last in the ranking of innovations in Poland. Analysis of research results indicates that there is no detailed research on regional level of cooperation with business environment institutions in the cross-border context. This article presents the results of studies which took into account factors affecting the level of cooperation between companies and business environment institutions in Podlaskie voivodeship in Poland and in neighboring regions of Belarus. The context of the research was implementation of innovation in Podlaskie region in Poland. The author assumes that the research results will contribute to the growing knowledge on the forms of business cooperation. They will also contribute to the development of innovativeness and increase of competitiveness potential of the region.

#### 2 Review of the Literature

Enterprises must evolve constantly, change business processes and introduce new products in order survive in rapidly evolving reality. Such innovative development is the main driving force for the economic growth of states and regions (Skawińska and Zalewski 2009; van der Zwan 2016). Development of companies is influenced by many factors related to both the internal resources and environment in which the company operates. Contemporary development processes are becoming more and more frequent in a specific system of interconnections between different entities. Growing globalization on the one hand forces competition between companies, on the other hand necessitates cooperation. As a result, networks are created by enterprises, public administration units, research units and non-government organizations. Networking facilitates exchange of information and generation of new ideas. Collaboration between businesses is becoming increasingly important and networking becomes a typical way of functioning in the business world (Sroka and Cygler 2014).

Literature highlights the diversity of forms of cooperation between organizations (Bouwen and Taillieu 2004; Schruijer 2006; Wybieralski 2015). Cooperation should ensure that partners meet their individual goals as well as the goals of joint organizations. We can find a definition of cooperation as a relationship in which individuals, groups and organizations interact. This includes sharing or transfer of complementary skills and resources as well as the development of these resources to benefit collaborating stakeholders (Gnyawali et al. 2006). In dynamic terms cooperation is an activity that involves the coordination of partial tasks. These tasks result from a fixed division of labor or relations between economic entities. The scope of coordination is determined on the basis of contracts and agreements that facilitate fulfillment of specific tasks from the formal point of view (Połomska-Jasieńowska 2010). The results of various organizations' combined efforts are mutual learning and common problem-solving. It should be mentioned that joint efforts do not always lead to positive solutions. In the case of a number of alliances made by cooperating companies their stated objectives were not achieved and the intended benefits were not gained (Kale and Singh 2009; Lunnan and Haugland 2008; Keasler and Denning 2009). Different forms of cooperation between companies make currently one of the ways of business operations. Cooperation is a permanent mechanism for allocation of resources. And strategic partnership for a long time is a requirement for effective management. Many authors express the view that in the process of cooperation organizations cooperate and form relationships based on mutual benefits. One of them—the increase in innovation and cooperation between organizations is regarded a facilitator of innovations (Florida 2007; Tu et al. 2014; Emami and Dimov 2017). Literature highlights the diversity of forms of cooperation between organizations (Bouwen and Taillieu 2004; Schruijer 2006). They include classic forms such as strategic alliances and innovative forms such as technology clusters or enterprise networks. The mechanisms of creating new organizational forms are important for creating potential links between organizations.

Human aspects are an important issue in the case of cooperation. They concern actions aimed at enhancing creativity, entrepreneurship and innovation. An innovative company, in order to survive on the market, must constantly monitor the market situation, anticipate changes to respond to them and use them as opportunities. The effect of these actions may be an increased efficiency of regional and local growth factors (Porter 1998; Tu et al. 2014). As defined by the OECD in the Oslo Manual innovation is the introduction or application of a significantly improved product (or service), process, new marketing method or organizational business practice, work organization or external relations (OECD 2005). Innovation implementation processes can be strengthened through geographic proximity, linkages and collaboration between actors (Lecznar 2007).

The main factors influencing effectiveness of innovation implementation are human capital (knowledge), structural capital (learning capacity) and relational capital (Porter 2001). Relational capital is defined as a set of relations between entities in the region. The cultural similarity of subjects and the awareness of belonging to a given community are important. Capitalization can lead to increased cooperation of companies with suppliers and customers and greater mobility of human resources (Kowalski 2010; Maennig and Ölschläger 2010). The concept of open innovation is the process of systematic generation of new ideas and products and assimilation of the existing knowledge. This is done through constructive interaction in a dynamic environment of competent organizations and specialized staff. This concept is based on combining new ideas that are complementary to the existing research and development projects (European Commission 2008; Ciriaci et al. 2016).

Regions that occupy top places in the rankings of competitiveness are also regions with high levels of innovation. In order to improve the competitive position of the region, it is necessary to create favorable conditions for the generation of innovation (Hollanders et al. 2012; Porter 2001). As a prerequisite for sustainable economic development of the region, it is capable of creating knowledge and innovation. In order to achieve a high level of regional competitiveness, investments in a knowledge-based economy, such as human capital development and institutional support, are needed (Martin and Sunley 2003). Growth in business innovation is necessary to improve their market competitiveness (Ejdys et al. 2015). The need for innovation is evident not only at the enterprise level. Also in the European Union policy is increasing awareness of the importance of the role of innovation in the development of regions and the need to take into account the regional conditions of business development. As a consequence, the absorption of innovation becomes one of the key elements of economic and social cohesion policy at the level of regions and states of the European Union (Barska 2014). An important element of the regional innovation support environment is business support institutions, business development organizations, innovation centers and many others. Many business support instruments are offered by specialized business environment institutions. These include business support centers, business organizations, service companies and financial institutions (Lisowska 2013).

The role of raising entrepreneurs' awareness should be taken over by the business environment institutions (BEI), whose task should be primarily emphasizing the long-term benefits resulting from cooperation. The role of business environment institutions in implementing innovation is important because of their close cooperation with local entrepreneurs. This enables direct actions such as counseling, lending, business information, and indirect influence on awareness and improvement of local entrepreneurship through training and courses. The form of message transmitted by the BEI is very important in this process. The language of benefits should be spoken when promoting an offer for cooperation between enterprises. It should be emphasized that participation in joint studies, group shopping or activities in the area of joint promotion can lower costs for companies or save time. Entrepreneurs do not have too many opportunities to communicate with each other. Most entrepreneurs work on their own or in small groups sometimes (Leigh and Blakely 2013). Business environment institutions (BEI) offer services that primarily affect the local and regional environment outside the enterprise business.

Today studies of national range and regional studies can be distinguished, mostly relating to the situation in individual provinces. According to research results, there are relatively small number of business environment institutions in the Podlasie region. At the same time, entrepreneurs point out that the BEI offer is not fully adapted to their needs. More professionalization of BEI's activities is required, which should translate into improvements in the quality of BEI's services. The result should be increased transfer of knowledge, innovation and technology, especially to small and medium enterprises. In a poorly-developed low-income region, such as the Podlaskie Voivodeship, it is necessary to target BEI's activities to initiate and incubate businesses and to empower existing businesses by providing funding at an early stage of their development (Urząd Marszałkowski Województwa Podlaskiego 2015).

# 3 Methodology

The article includes a number of quantitative studies which covered 381 Polish companies from leading industries in the Podlaskie Voivodeship (including food industry, wood and furniture industry, metal and machine industry, construction industry) and 121 companies from Republic of Belarus (from similar sectors). Targeted companies were selected in order to limit the research to specific actors whose opinion was authoritative and most desirable. The study was not representative. The main objective of the research was to define relations between business entities and business environment institutions in the context of innovativeness development in the Podlaskie Voivodeship. The survey was addressed to business owners or senior executives. The subject literature analysis and team discussions have identified the factors that may influence cooperation between businesses and business environment in the context of enhancing innovation (Strzyżewska 2011; Górzyński 2006; Bengtsson and Kock 2014; Ford and Håkansson 2013). It has been

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assumed that undertaking some forms of mutual cooperation between companies and business environment institutions may increase the propensity for innovative development.

The research problem was presented in the form of questions concerning current and future level of cooperation between the surveyed companies and business environment institutions. Responses were interpreted from the perspective of the impact of individual factors on the ability to implement innovation. Interpretation of results and comparative analysis of Polish and Belarusian companies was conducted. The key question was: How do respondents assess the current level of cooperation between the companies and business environment institutions? The answer was further explained by indicating the degree of companies' interest in strengthening their cooperation with business environment institutions in the near future. The questions were aimed at identifying a general approach to cooperation with business environment institutions in Poland and Belarus. In order to deepen the analysis, the question of the extent to which individual factors influence the current level of cooperation between respondent enterprises and business environment institutions was asked. Verified was also to what extent the positive changes in factors can contribute to improve the cooperation in next 2-3 years. The focus was mainly on factors affecting the implementation of enterprise innovation.

Respondents evaluated factors in a 7-point scale (1—means total absence, 7—very significant). Interpretation was carried out using basic statistical measures: measures of central tendency—mean (x), median (Me) and dominant (D). Spearman's rank correlation was used to indicate the interdependence of ratings. The group of analyzed companies in Poland and in Belarus is presented in Table 1.

In the group of analyzed enterprises in Poland, a quite similar share of particular industries can be noticed. It amounted to 19.95% for construction and the metal and machine industry, 21.52% for the wood processing industry and furniture production, up to 21.79% for the food industry. The largest share of enterprises from the food industry and wood processing and furniture production is primarily due to the agricultural character of the region and the long tradition of functioning of such enterprises. Small and medium enterprises dominate in these industries. According to the size of the enterprise, the largest share was held by small and medium companies (38.32% and 28.87%, respectively). These are mostly entities with a stable position that have been operating on the market for over 10 years. Research confirms that such enterprises strive to strengthen their market position. They also actively seek partners for cooperation in the field of innovation implementation. The goal of these activities is primarily development towards competitors.

The structure of the analyzed companies in Belarus is different. The largest share is held by companies representing construction (55.37%), followed by companies from the wood industry. It seems that this is due to the specificity of the Belarusian economy, which is focused on the implementation of industrial facilities. In the last dozen years we can observe, acceleration of construction and housing construction investments. This structure of the economy is also a remnant of the long-term dependence on the influence of the Soviet Union and later Russia. It also affects the size structure of companies, where the largest share is held by large enterprises

**Table 1** Characteristics of the analyzed companies

	Companies				
		Including indu	ıstry		
	Total N (%)	Construction N (%)	Food N (%)	Metal and machine N (%)	Wood and furniture N (%)
Poland					
Company size-	measured by	the number of	employees		
<10 people	85 (22.31)	20 (26.32)	8 (9.64)	10 (13.16)	25 (30.49)
10-49 people	146 (38.32)	23 (30.26)	40 (48.19)	26 (34.21)	42 (51.22)
50–249 people	110 (28.87)	27 (35.53)	26 (31.33)	23 (30.26)	10 (12.19)
>249 people	40 (10.50)	6 (7.89)	9 (10.84)	17 (22.37)	5 (6.10)
Total N (%)	381 (100)	76 (19.95)	83 (21.79)	76 (19.95)	82 (21.52)
Belarus					
Company size-	-measured by	the number of	employees <sup>a</sup>		
<16 people	17 (14.05)	6 (8.96)	1 (10.00)	1 (7.69)	7 (24.14)
16–100 people	36 (29.75)	24 (35.82)	6 (60.00)	3 (23.08)	3 (10.34)
101–250 people	18 (14.88)	12 (17.91)	3 (30.00)	0 (0.00)	6 (20.69)
>250 people	50 (41.32)	25 (37.31)	0 (0.00)	9 (69.23)	13 (44.83)
Total N (%)	121 (100)	67 (55.37)	10 (8.26)	13 (10.74)	29 (23.97)

Source: Own study

employing over 250 people (41.32%). In this case, the largest number of companies operating on the market over 10 years, sometimes even over 30 years. In large part, these are state-owned entities or transformed from state-owned enterprises. In their case, the tendency to risk and implement innovations is much lower.

# 4 Analysis of the Results

The innovative potential of enterprises is strongly influenced by the tendency to interact with other market participants. This applies in particular to cooperation with institutions that support development opportunities. Therefore, from the point of view of the possibility of implementing innovations in enterprises in Poland and Belarus, it was important to assess the perception of enterprises by the current level of cooperation with business environment institutions. The degree of assessment of the possibilities of future cooperation was also taken as an important factor.

<sup>&</sup>lt;sup>a</sup>Differences in employment intervals in enterprises are due to different statistical data collection systems in Poland and Belarus

**Table 2** Current and future cooperation whit business environment institutions in the respondents' opinion (Polish companies/Belarusian companies)

Specification	Mean	Median	Dominant		
Declared level of cooperation with business environment institutions					
Food companies	3.42/4.40	3.00/4.50	3/3-5		
Metal and machine companies	3.09/3.62	3.00/4.00	3/3-5		
Wood and furniture companies	2.77/4.72	3.00/5.00	1/7		
Construction companies	2.84/4.10	3.00/4.00	1/4		
Degree of interest in strengthening cooperation within the next 2–3 years					
Food companies	3.64/4.50	4.00/4.00	4/4		
Metal and machine companies	3.97/4.38	4.00/5.00	3-5/5		
Wood and furniture companies	3.41/4.59	3.00/4.00	3/4		
Construction companies	3.68/4.10	4.00/4.00	3/4		

Correlation of Spearman's rank  $(r_s)$  between the current level of cooperation and possibilities of its strengthening in the future (significance level of 0.05)

	Spearman'rank (rs)
Food companies	0.5502/0.5206
Metal and machine companies	0.6704/0.2892
Wood and furniture companies	0.7243/0.8493
Construction companies	0.6308/0.5710

Source: Own study

A statistical analysis was carried out to determine if there is a correlation between the level of assessment of areas of existing cooperation and the assessment of these areas in the future. Enterprises were asked for self-assessment, taking into account factors considered important in terms of their impact on the ability to implement innovations (Table 2). The research results are not optimistic—Polish respondents assessed the low level of existing cooperation between their companies and business environment institutions, while the average ratings for individual industries are slightly different.

The analysis of Spearman's correlation coefficient indicates that in all industries studied in Poland and Belarus there is a positive correlation between the evaluation of the current level of cooperation and the possibility of strengthening this cooperation in the future. This means that the higher the surveyed enterprises assessed the level of existing cooperation at present, the higher are the assessments of the possibilities to strengthen this cooperation in the near future. Assessment of the correlation strength of ratings in the case of Polish enterprises indicates a strong dependence in the wood industry and moderate dependence in other industries. This may indicate some concern about cooperation at the moment. He also indicates a positive attitude to the possibility of undertaking such cooperation in the future. Polish companies are primarily concerned about political turmoil and the dependence of the Belarusian economy on Russia. The studies indicate that in the woodworking and furniture industries as well as in the construction industry, most of the analyzed companies have not yet started cooperation with business environment institutions.

The assessment of the current level of cooperation between Polish companies and business environment institutions is the lowest in the case of the wood industry (average rating 2.77), and the highest in the food industry (average 3.42). However, these are not optimistic values and point to the pessimistic attitude of enterprises to obtain positive effects with these institutions. The dominant and median value is 3 for all industries studied. This is surprising, because in the case of the construction industry it is often required to establish cooperation with other institutions to implement the investment. To explain such behavior, one should look deeper than just economic theory. The analyzed areas are a mixture of many cultures and nations. They were shaped by numerous war experiences and political domination of foreign systems. It causes uncertainty about possible future directions of development and limits readiness to undertake commitments that result from cooperation in the longer term. Current turbulent political events at the interface between Western Europe and Russia are also not conducive to economic stabilization. It can be said that political. social and economic conditions have shaped the climate that is unfavorable for cooperation in various areas of the public sphere. Authors of other studies (Wasiluk 2017; Tomaszuk 2016) also notice a dominant attitude, which includes preferences of their own benefits nowadays, careful contacts, low trust in contacts with other entities. This limits the openness to new ideas and innovative solutions.

A slightly greater optimism in the cooperation of Polish enterprises with business environment institutions can be observed in the respondents' declarations regarding the near future. The average marks in various industries also differ slightly. However, these differences are not statistically significant. Although the diversity of assessments is lower than in the case of current cooperation, it still remains high. The analysis of Spearman's correlation coefficient indicates a moderate (in the case of the food industry), and even high (in the case of other sectors) dependence of assessments of current cooperation on the possibilities of strengthening it over the next 2–3 years. The higher the respondents assessed the current level of their cooperation with these entities, the more willingness to strengthen it in the future was declared. This is due to the growing awareness of the surveyed companies regarding the benefits of such cooperation in the face of challenges posed by the environment. The experience and the results of such cooperation in the past also have an impact.

In the case of enterprises from Belarus, the results of the evaluation of the current cooperation with business environment institutions are slightly higher. The assessment of the growth of such cooperation in the future is also more optimistic. Belarusian enterprises see to a greater extent assisting institutions as more helpful. This approach applies in particular to the wood industry (average rating 4.72) and the food industry (4.40). It also translates into a higher assessment of the possibility of closer cooperation in the future. Again, the decisive role here seems to be played by the greater confidence of Belarusian companies in all types of institutions. This results from the experience of many years of functioning in a centrally planned economy. In such conditions, the continuity of operation in a stable environment counts, implementation of innovation is not a priority.

A higher assessment of the current level of cooperation is linked to bigger interest in increasing this cooperation in the next 2–3 years. This is due to the positive effects of such cooperation. It also depends to a large extent on the actual and expected benefits of cooperation. Taking into account the earlier results of the analysis of the issues in question (Wasiluk and Daniluk 2013) it seems that the companies in Poland focus on cooperative forms which allow for immediate effects. Therefore they are not the forms conducive to development of innovation in the long term. The pro-innovative reasons analyzed in this text were not in the respondents' opinion the primary ones to undertake cooperation with business environment institutions. They contributed establishing contacts between two spheres of economic life to a small degree only. For the majority of sectors the dominant remained at level 1, which proves that the highest percentage of respondents have never undertaken any cooperation in this area. The most active in cooperation with business environment institutions were food companies and metal and machine companies, while the most frequent reason was the possibility to get aid in the transfer of technology. There were no statistically significant differences between the analyzed sectors in their ratings of reasons (Table 3).

Analysis of the mean values of the current level of Polish companies' cooperation shows that there have been only two indications above 4 (on a 7-level scale). This applies to factors such as access to financial institutions and support programs. These are indications of the food industry companies only. Most of the other factors have been rated below 4 by all sectors. The higher values refer to aspects of cooperation related to access to financial institutions and implementation of support programs, business consulting and business development assistance—both for construction and industrial companies. However, it should be borne in mind that the indicated areas do not require deep engagement in business cooperation and the potential effects do not apply to areas of innovation implementation. In this context, concerns about areas that have a particularly significant impact on innovation development may be of concern. Cooperation mechanisms related to implementation of innovations require high involvement of company's own resources and high level of trust in the cooperating actor. The low ratings of cooperation with business environment institutions indicate a lack of willingness on the part of enterprises to develop deeper cooperative relationships. They may also point to a low assessment of BEIs' service offerings or low awareness of entrepreneurs about the scope of the existing offer and the potential benefits when using the opportunities available to engage their resources. These results fit into the stereotypical image of Podlasie entrepreneurs as very distrustful in their mutual relations. This also applies to research on innovation and collaboration with business environment institutions (Daniluk 2016). The obtained results also show that Podlaskie companies rarely undertake R&D activities in cooperation with other entities. Companies in Podlaskie Province do not trust potential partners. The main reason is the fear of losing technology, customers and employees. A small group of entrepreneurs in Podlaskie Province express their desire to take advantage of BEI's offer in the future. It should be stated that the Podlasie entrepreneurs do not cooperate with BEI because they do not see the potential benefits of such activities.

**Table 3** Descriptive statistics for the assessment of the impact of various on the level of existing cooperation with business environment institutions (Polish companies/Belarusian companies)

	Mean	Median	Dominant
	Food comp		
		machine con	
	Wood and furniture companie		
Specification	Construction	on companie	S
The possibility of joint research and development projects	3.05/4.00	3.00/4.00	2/3–4
	3.13/3.38	3.00/4.00	3/4
	2.73/3.72	2.50/4.00	1/1
	2.95/3.37	2.50/3.00	1/3
Access to research centers/research infrastructure	3.28/4.10	3.00/4.00	1/4
	3.25/3.69	3.00/4.00	3/4
	2.65/3.97	2.00/4.00	1/1–5
	2.80/3.64	2.50/4.00	1/4
Access to financial institutions and support programs	4.02/5.10	4.00/5.00	5/4
	3.91/3.54	4.00/4.00	3/2–3
	3.27/3.79	3.00/4.00	1/1
	3.51/3.54	3.00/3.00	1-3/3
Consultation/Business Consulting	3.71/4.80	4.00/4.50	3/5/7
	3.55/4.38	3.50/5.00	4/5
	3.30/4.62	3.00/5.00	1/6
	3.28/4.40	3.00/5.00	1/5
Commercialization of research results	3.13/4.30	3.00/4.00	3/3
	3.01/3.77	3.00/4.00	3/4
	2.66/3.55	3.00/4.00	1/1
	2.76/3.30	3.00/3.00	1/1-3
Access to databases	3.31/5.20	3.00/5.50	3/7
	3.05/3.77	3.00/3.00	3/2-3
	3.05/4.38	3.00/5.00	1/6–7
	3.22/3.85	3.00/4.00	1/3
Help in business development	3.89/5.20	4.00/5.00	4/7
	3.53/3.92	3.00/4.00	3/2-4-5
	3.43/4.52	3.00/5.00	3/7
	3.47/3.96	3.00/4.00	1-6/4
Assistance in technology transfer	3.58/5.20	4.00/6.00	4/6–7
	3.45/4.08	3.00/4.00	3/4
	3.27/4.34	3.00/5.00	1/6
	3.09/3.93	3.00/4.00	1/1
Past experience with cooperation	3.53/4.60	4.00/4.50	4/7
<del>-</del>	3.32/3.69	3.00/3.00	3/2
	3.15/4.55	3.00/5.00	1/6–7
	3.07/3.99	3.00/4.00	2/3

Source: Own study

These conclusions are consistent with other studies in Poland (Kamińska 2011; Bąkowski and Mażewska 2014; Pietruszewska-Cetkowska and Zygmont 2014). It seems that the attitude of business environment institutions is very conservative. These institutions define their offer without seeking to know the potential customer better. In this way, the offer often goes to a random recipient who is not interested in its scope. Therefore, the promotion of BEI services is also ineffective and information addressed to entrepreneurs does not go to fertile ground. It is necessary to change this attitude, which may require BEI's information and promotion activities focus more on business benefits for specific groups of companies. This also applies to the increased capacity to implement innovation. The study results are not very optimistic also in the area of Polish and Belarusian companies' assessment of cooperation with business environment institutions in the next 2–3 years (Table 4).

Analyzing the intensification of co-operation in the next 2–3 years, no particular relationship was found. Most companies, both in present, as well as in the future declarations, do not see the need for closer cooperation with BEI. This applies to both Polish and Belarusian companies. The declared willingness to start cooperation is higher from its current level, but a large percentage of the companies do not intend to undertake such cooperation in the near future. In respondents' opinion the positive changes, especially with respect to help in technology transfer, would influence the improvement of companies' cooperation with business environment institutions to the greatest extent. Improved possibilities for implementation of joint research and development projects and easier access to research facilities or infrastructure would also be significant. A positive change in helping to commercialize research would have a relatively smaller impact. This seems to be due to the fact that Polish companies rarely undertake research and development and if they do it is only for their own needs. This is primarily due to the closed nature of the Polish-Belarusian border and the resulting lack of information on potential areas and benefits of crossborder cooperation. Another reason is the stereotypical perception of the Belarusian economy as backward, devoid of innovative potential.

#### 5 Conclusion

Research has shown a low level of willingness to establish relations with business environment institutions in the case of Polish as well as Belarusian companies. This concerns both the current cooperation and readiness to strengthen it in the next 2–3 years. These are not optimistic conclusions from the point of view of innovation. It is significant that the assessments of most factors with a direct impact on innovation did not exceed level 4 in a 7-level scale. Neither Polish nor Belarusian companies see the need for cooperation and economic benefits they can achieve in long-term business. For Polish and Belarusian companies the benefits are of prime importance. They mainly concern the possibility of expanding sales to new markets and improving quality of products and services. This is mainly due to the existing model of cooperation. Most business environment institutions cooperate with businesses in a

**Table 4** Descriptive statistics for the assessment of the impact of various on the level of *future cooperation* with business environment institutions (Polish companies/Belarusian companies)

1	1		1 /
	Mean	Median	Dominant
	Food comp		
		machine con	
		furniture cor	
Specification		on companies	
The possibility of joint research and development projects	3.60/3.20	4.00/2.50	5/2
	4.04/4.15	4.00/4.00	3/3–4
	3.39/3.83	3.00/4.00	2/1–2–6
	3.62/3.64	3.50/3.00	2/2
Access to research centers/research infrastructure	3.61/3.90	4.00/3.50	4/3
	4.11/4.15	4.00/5.00	5/5
	3.53/3.93	3.00/4.00	1-4/5
	3.41/3.87	3.00/4.00	3/3
Access to financial institutions and support programs	4.27/4.60	5.00/4.00	5/4
	4.37/3.92	4.00/4.00	3/3
	4.02/4.03	4.00/5.00	4/5
	4.28/3.82	4.00/4.00	3/3
Consultation/Business Consulting	3.40/4.80	4.00/4.50	4/4–6
	3.95/4.46	4.00/5.00	6/4
	3.88/4.38	4.00/5.00	4-5/7
	4.00/4.46	4.00/4.00	4/6
Commercialization of research results	3.52/4.60	4.00/4.50	4/4–6
	3.43/4.38	3.00/5.00	3/3-6
	3.28/3.83	2.00/5.00	1/1–6
	3.43/3.90	3.00/4.00	4/5
Access to databases	3.65/4.80	4.00/5.00	5/5–6
	3.80/4.46	4.00/4.00	4–53
	3.62/4.83	3.50/5.00	1-3/6-7
	3.57/4.19	3.00/4.00	3/6
Help in business development	4.22/5.20	4.00/5.00	5/5–7
	4.03/4.92	4.00/5.00	4/4
	4.20/4.93	4.00/5.00	4/7
	4.24/4.18	4.50/4.00	5/2-4
Assistance in technology transfer	4.08/5.10	4.00/5.50	5/6
	3.88/4.69	4.00/4.00	4/3
	3.96/4.83	4.00/5.00	4/6–7
	3.88/4.36	4.00/5.00	4/6
Past experience with cooperation	3.69/4.80	4.00/5.00	5/4–7
•	3.64/4.46	3.00/4.00	3/4–6
	3.46/4.76	3.50/5.00	3/5
	3.45/4.18	3.00/4.00	3/3
	1 3, 1.10	1 3.007 1.00	15.5

Source: Own study

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standard way, to a very limited extent. This makes their help less effective and does not meet the needs of entrepreneurs dealing with nonstandard problems.

As a result, the low level of cooperation between business and business environment institutions hinders creation and effective functioning of the regional innovation system. This applies to both the Podlaskie Voivodeship and Belarusian side. The proposed measures contributing to more efficient support for entrepreneurs in the region of Podlasie that can be provided by business environment institutions:

- Coordination of activities between Polish and Belarusian parties through creation
  of a council-based body for business environment institutions. The mutual
  cooperation of business environment institutions on both sides of the PolishBelarusian border would allow entrepreneurs to benefit from a system of coherent
  and comprehensive services.
- Creation of specialized structures that could collaborate with businesses more in line with their current needs. This applies in particular to regional and local production organization systems. Taking into account the requirements of globalization it would be possible to strengthen regional institutions on the domestic market.
- 3. Creation by the regional authorities of common, cross-border support programs for entrepreneurship, innovation and development of small and medium-sized enterprises. The programs can be useful first and foremost in developing the potential of enterprise innovation at international level. An important aspect of creating such programs is to take into account the experience of existing contacts and to draw attention to the needs of the target support groups.
- 4. Creation of support instruments adapted to the level of enterprise development in the region. These instruments should take into account the differences in potential and possibilities of absorption of services by enterprises and the implementation of innovation.
- 5. Encouraging cooperation of innovation centers at regional level within regional innovation systems. They should create cross-border networks between administrations, research institutions and business centers. Initiation and strengthening of cooperation between actors within the regional innovation system should be one of the main tasks of local authorities. The result of their activities should be the creation of cross-border Polish-Belarusian cooperation networks.

Business environment institutions in Podlaskie Voivodeship are not prepared to provide more advanced services to a larger group of stakeholders. There is not enough cooperation between the group of these entities in the Podlaskie Voivodeship and in Belarus. This negatively affects the level of innovativeness of Podlasie enterprises and the entire region. It is necessary to integrate innovation centers from both regions—Poland and Belarus. Increasing the regions innovation potential requires improving the cooperation with business environment institutions, especially at the local level.

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#### References

- Bakowski, A., & Mażewska, M. (Eds.). (2014). Ośrodki innowacji w Polsce (z uwzględnieniem inkubatorów przedsiębiorczości). Raport z badania 2014 [Innovation centers in Poland (including business incubators). Research Report 2014]. Warszawa: PARP.
- Barska, A. (2014). Regionalne aspekty gospodarki [Regional aspects of economy]. Warszawa: PWE.
- Bengtsson, M., & Kock, S. (2014). Coopetition Quo Vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180–188.
- Bouwen, R., & Taillieu, T. (2004). Multi-party collaboration as social learning for interdependence: Developing relational knowing for sustainable natural resource management. *Journal of Community and Applied Social Psychology*, 14, 137–153.
- Ciriaci, D., Moncada-Paternò-Castello, P., & Voight, P. (2016). Innovation and job creation: A sustainable relation? *Eurasian Business Review*, 6(2), 189–213.
- Daniluk, A. (2016). Conditions of cooperation between enterprises and business environment institutions using the Podlasie region as an example. *Ekonomia i Zarządzanie*, 8(4), 18–27.
- Daniluk, A. (2017). Cooperation between business companies and the institutions in the context of innovations implementation. *Procedia Engineering*, 182, 127–134.
- Ejdys, J., Ustinovicius, L., & Stankevičienė, J. (2015). Innovative application of contemporary management methods in a knowledge-based economy – interdisciplinarity in science. *Journal of Business Economics and Management*, 16(1), 261–274.
- Emami, A., & Dimov, D. (2017). Degree of innovation and the entrepreneurs' intention to create value: A comparative study of experienced and novice entrepreneurs. *Eurasian Business Review*, 7(2), 161–182.
- European Commission. (2008). The concept of clusters and cluster policies and their role for competitiveness and innovation: Main statistical results and lessons learned. European Commission. Accessed July 9, 2017, from https://publications.europa.eu/en/publication-detail/-/publication/c15445bd-8203-4d15-b907-56ea17a9876e/language-en
- Florida, R. (2007). The flight of the creative class. The new global competition for talent. New York: Harper Collins.
- Ford, D., & Håkansson, H. (2013). Competition in business networks. *Industrial Marketing Management*, 42, 1017–1024.
- Fratesi, U. (2015). Regional knowledge flows and innovation policy: A dynamic approach. *Regional Studies*, 49(11), 1859–1872.
- Gnyawali, D. R., He, J., & Madhaven, R. (2006). Impact of co-opetition on firm competitive behaviour. An empirical examination. *Journal of Management*, 32(4), 507–509.
- Górzyński, M. (Ed.). (2006). System wspierania gron przedsiębiorczości. Publikacja podsumowująca [Supporting system for entrepreneur clusters. Summary report]. Rzeszów: IG WSIiZ.
- Hollanders, H., Rivera Léon, L., & Roman, L. (2012). Regional innovation scoreboard. European Commission. Accessed June 22, 2017, from https://poalgarve21.ccdr-alg.pt/site/sites/ poalgarve21.ccdr-alg.pt/files/2014-2020/10.\_regional\_innovation\_scoreboard\_2012.pdf
- Kale, P., & Singh, H. (2009). Managing strategic alliances: What do we know, and where do we go from here? *Academy of Management Perspectives*, 23, 45–62.
- Kamińska, A. (2011). Wpływ instytucji otoczenia biznesu na rozwój małych i średnich przedsiębiorstw w regionie lubelskim [The impact of business environment institutions for the

- development of small and medium-sized enterprises in the lubelskie region]. *Barometr Regionalny*, 1(23), 53-65.
- Keasler, T. R., & Denning, K. C. (2009). A re-examination of corporate strategic alliance. New market responses. *Quarterly Journal of Finance and Accounting*, 48, 21–40.
- Kowalski, A. M. (2010). Kooperacja w ramach klastrów jako czynnik zwiększania innowacyjności i konkurencyjności regionów [Cooperation within clusters as a factor for increasing the innovation and competitiveness of regions]. Gospodarka Narodowa, 5–6, 225–226.
- Lecznar, M. (2007). Znaczenie klastrów w transferze wiedzy i innowacji wnioski dla Podkarpacia [The importance of clusters in the transfer of knowledge and innovation conclusions for Podkarpacie]. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.
- Leigh, N. G., & Blakely, E. J. (2013). *Planning local economic development. Theory and practice* (5th ed.). London: SAGE.
- Lisowska, R. (2013). Zarządzanie rozwojem małych i średnich przedsiębiorstw w obszarach zmarginalizowanych [Managing the development of small and medium-sized enterprises in the marginalized areas]. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Lunnan, R., & Haugland, S. A. (2008). Predicting and measuring alliance performance: A multidimensional analysis. Strategic Management Journal, 29, 545–556.
- Maennig, W., & Ölschläger, M. (2010). Innovative milieux and regional competitiveness: The role of associations and chambers of commerce and industry in Germany. *Regional Studies*, 45(4), 441–452.
- Martin, R., & Sunley, P. (2003). Deconstructing clusters: Chaotic concept or policy panacea? *Journal of Economic Geography*, 3(1), 5–35.
- OECD, (2005). Oslo manual: Guidelines for collecting and interpreting innovation data. Paris: Organisation for Economic Co-operation and Development. Accessed May 20, 2017, from http://www.oecd.org/science/inno/2367580.pdf
- Pietruszewska-Cetkowska, I., & Zygmont, S. (2014). Model działania Instytucji Otoczenia Biznesu stymulujący proinnowacyjną współpracę przedsiębiorstw w województwie kujawskopomorskim [Model of Business Environment Institutions operations stimulating pro-innovative cooperation of companies in Kujawsko-Pomorskie Province]. Toruń: Toruńska Agencja Rozwoju Regionalnego S.A.
- Połomska-Jasieniowska, A. (2010). Wewnętrzne uwarunkowania współdziałania gospodarczego małych przedsiębiorstw [Internal conditions for economic cooperation between small businesses]. In M. Matejun (Ed.), Wyzwania i perspektywy zarządzania w małych i średnich przedsiębiorstwach [Challenges and perspectives of management in small and medium-sized enterprises]. Warszawa: C.H. Beck. Ch.19.
- Porter, M. E. (1998). The competitive advantage: Creating and sustaining superior performance. New York: Free Press.
- Porter, M. E. (2001). *Porter o konkurencji [On competition]*. Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Schruijer, S. (2006). Research on collaboration in action. *International Journal of Action Research*, 2(2), 222–242.
- Skawińska, E., & Zalewski, R. (2009). Klastry biznesowe w rozwoju konkurencyjności i innowacyjności regionów. Świat Europa Polska [Business clusters in the development of competitiveness and innovation of regions. World Europe Poland]. Warszawa: PWE.
- Smętkowski, M., Olechnicka, A., & Płoszaj, A. (2017). Współpraca naukowa jako element potencjału innowacyjnego regionów europejskich [Scientific cooperation as part of the innovation potential of European regions]. *Studia Regionalne i Lokalne*, 1(67), 5–25.
- Sroka, W., & Cygler, J. (2014). Pathologies in inter-organizational networks. *Procedia Economic and Finance*, 12, 626–635.
- Strzyżewska, M. (2011). Współpraca między przedsiębiorstwami. Odniesienie do polskiej praktyki [Cooperation between companies. Reference to Polish practice]. Warszawa: Oficyna Wydawnicza SGH.

- Tomaszuk, A. (2016). Stereotypes in the perception of cross-border business partners (on the example of Podlasie enterpreneurs). *Economics and Management*, 8(2), 55–62.
- Tu, C., Hwang, S. H., & Wong, J. Y. (2014). How does co-operation affect innovation in microenterprises? *Management Decision*, 52(8), 1390–1409.
- Urząd Marszałkowski Województwa Podlaskiego. (2015). Zapotrzebowanie przedsiębiorstw na usługi świadczone przez instytucje otoczenia biznesu w regionie podlaskim. Raport [The demand of enterprises for services provided by business environment institutions in the Podlasie region. The report]. Białystok: Urząd Marszałkowski Województwa Podlaskiego. Accessed June 20, 2017, from https://www.wrotapodlasia.pl/pl/region\_i\_gospodarka/wiadomosci/gospodarka/raport-z-wynikami-badania-w-zakresie-popytu-przedsiebiorstw-z-podlaskiego-na-usługi-oferowane-przez-instytucje-okolobiznesowe.html
- Van der Zwan, P., Thurik, R., Verheul, I., & Hessels, J. (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review*, 6 (3), 273–295.
- Wasiluk, A. (2017). Pro-innovative prerequisites for establishing the cooperation between companies (in the perspective of creation and development of clusters). *Procedia Engineering*, 182, 755–762.
- Wasiluk, A., & Daniluk, A. (2013). *The possibilities of creating cross-border clusters*. Vilnius: Vilnius University Publishing House.
- Wybieralski, P. (2015). Alianse technologiczne a strategiczne zachowania korporacji międzynarodowych na rynkach niedoskonatych. [Technological alliances and strategic behavior of international corporations in imperfect markets]. Toruń: Adam Marszałek.

# Foreign Entrepreneurs in the Russian Federation: Barriers and Advantages



Victor Barhatov, Antonio Campa, and Dmitri Pletnev

**Abstract** Since 2000, the Russian Federation has started a gradual process of market opening that actually is not completed; anyway, this process has facilitated procedure of creation of a small and medium business made by foreigners in Russia. Main factors that influence positively volume of foreign investments in Russia are the taxation level that actually is 15% and the amount of time necessary to open a society (5 working days); furthermore, Russian market guarantees a highly skilled and educated workforce. Unfortunately, in the Russian Federation, there are no incentives or concessions for the opening of a new small-medium business, and it can represent a problem for a foreign investor who wants to open a new company. This study attempts to address main positive and negative factors of the Russian market that can influence a foreign investor who is interested to start a new activity in the Russian Federation. It examines law system that regulates economic sector in Russia, but it also uses direct experiences of foreigners who have already opened a small-medium business or an individual enterprise in Russia. Moreover, the article studies possible variants to make Russian market more open and favourable to foreign investors.

**Keywords** Small-medium business · Russia · Foreign investments · Regulation of market

#### 1 Introduction

The problematic transition from a socialist economy to the capitalism has generate a process of liberalization that is not completed (Lovell 2006). Moreover, in the last 15 years, the Russian Federation has created it's "own capitalism" that in part is national and in part is liberal. Immigration laws in the Russian Federation are more

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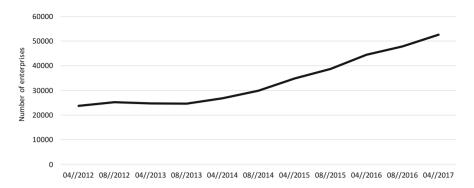


Fig. 1 Growth trend of enterprises without employees in the Russian Federation. Source: Vestnik gosudarstvennoy registratsii (2017)

liberal than in the Soviet Union because in the '90 years, during the early period of President Yeltsin, Russia has started a liberal process that gave also the possibility to foreigners to live and work in Russia easier than before (Ivakhnyuk 2009). In this context the possibility for a foreigner to open a small medium business present some positive factors but also some negative; in all cases, they are the result of a unique society, mentality and history that have ever characterized this country. The actual situation is also in part related to the fact that the phenomenon of foreign investors in Russia is relatively young; indeed first international cooperation in Russia has started only 25 years ago (Nummela 2011). For these reasons today Russia can be considered as a closed country but at the same time, it is an important possibility for foreigners to develop affairs or to start a new economic life. The Russian Federation, with 11,643 million immigrants, has the world's second larger number of immigrants, after the United States (United Nations 2015). Actually, immigrants in Russia represent the 8% of total population, so they give an important contribution to Russian GDP. Actually, foreign enterprises without employees in the Russian Federation are more than 55,000 they are the 1.5% of total enterprises in Russia and this number is growing up year by year. Figure 1 shows the growth trend of foreign enterprises without employees in the last 5 years.

In the last 3 years, foreign individual societies grew up of 45%, even if they are not equally distributed in all Russia; indeed 28% of them are only in the Central Federal District (where there is Moscow), more than in all Urals plus Siberia. Anyway, comparing these data with other countries is possible to affirm that in Russia there are not so many foreign companies without employees. For example, in Italy in 2015, there were more than 350 thousands foreign individual societies and they represented the 10% of total amount in Italy. Even if the proportion foreign/national individual societies between Italy and Russia is 6–1, is important to underline that growth trend in Italy in last 5 years is almost 33%, in the Russian Federation it is more than 51%.

So actually, in the Russian Federation, the number of foreign SMEs and entrepreneurs without employees is lower than other developed countries, anyway the

**Table 1** Immigrants in Russia by country of birth

Country	Number of immigrants
Ukraine	2,651,101
Uzbekistan	2,335,960
Tajikistan	1,105,500
Azerbaijan	610,327
Moldova	586,122
Kazakhstan	575,400
Kyrgyzstan	552,014
Armenia	514,663
Belarus	498,878
China	273,034
Germany	244,662
USA	142,405
Turkey	111,681
UK	111,275
Finland	77,665
Italy	53,649
France	53,382

Source: Minister of Internal Affairs RF (2016)

growth trend is showing that foreigners want to invest and work in Russian more today than in past times. This situation is the result of different factors, positive and negative, that influence this phenomenon. One of theme is the phenomenon of immigrations; indeed, in the 2015, the Russian Federation is at the third place for total amount of immigrants with more than 11.64 million people. The first are the United States of America with 46.62 million and the second is the Germany with 12 million of people (Kirk 2016). Russia's economic growth in the last 15 years is able to explain why actually the Russian Federation is on the third place (OECD 2016); anyway is also important to underline that most of them are coming from former soviet nations. Table 1 presents how many immigrants there are in the Russian Federation divided by their nationality.

Statistics of Table 1 show that only 3.5% of all immigrants are coming from the EU and almost the 91% are from former soviet countries. This difference between quantity of EU immigrants and former soviet countries is becoming higher also because of the recent political crisis in Ukraine. Table 2 shows the migration trend by country from 2008 to 2015 in thousands persons:

Even most of immigrants from the former Soviet Union come in Russia to work for a big company, there are a lot of immigrants that in the last 15 years are trying to start their own business, with the hope that in the future all their family might come too in the Russian Federation. At the same time, even though relations Russia-Western Countries look similar to those during the Cold War, especially after 2014 and even if number of immigrants from Western Countries is decreasing, it is also true that there are many European companies that continue to invest in the Russia Federation. Moreover Western investors are more interest to create new little

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**Table 2** Russian migration trend by country in thousand persons

Country	2008	2009	2012	2015
Azerbaijan	13.3	13.2	10.7	6.2
Armenia	20.8	21.7	17.8	13.0
Moldova	8.6	9.3	9.9	9.4
Belarus	1.1	1.7	7.0	2.7
Ukraine	24.7	24.0	20.5	83.9
Germany	-0.8	-0.8	0.3	-0.3
China	0.7	0.4	2.4	1.0
USA	-0.7	-0.5	-0.2	-0.3

Source: Karachurina (2015)

companies or joint venture in the last year because the euro/ruble exchange rate is lowered and partially stabilized at 70 during the 2016. A problem that doesn't favourite the immigration from other countries is the geographical conformation of Russia, indeed the biggest country of the world has expensive costs in order to move from one city to another (Kumo 2006). Immigration costs, as travel tickets and distance between motherland and the new city in which immigrant is moving, is one of the main factors that increase or decrease the migratory flow (Greenwood 1997). Moreover, the problem of connection between cities is a factor that doesn't help economy, because firms have to spend more to transport their goods, for this reason also foreign investors may be discouraged to invest in the Russian Federation (Brown et al. 2008).

So, a foreigner who wants to invest in Russia has to consider some factors that characterize this country; some of them are positive but some other do not help the development of foreign investments. In the following paragraphs are showed the most important positive and negative factors that influence a foreign investor who want to open a SME in the Russian Federation.

# 2 Why Foreign Entrepreneurs Should Invest in Russia?

# 2.1 Highly Qualified Manpower

In part because of the Soviet past tradition, Russia today is a country with a very high qualified work force. At first in the Russian Federation, the 100% of population have completed the primary education and the 57% of population between 25 and 35 years old has a certificate of high school (Mottaeva 2015). In 2016, the Russian Federation was 28th in the ranking of the human capital index made by the Economic World Forum. More in details for the age group 15–24, Russia is 14th; 28th for the age group 25–54 and 18th for the age group 55–64 (World Economic Forum 2016).

Looking at the Table 3, is possible to see that the human capital index of the Russian Federation is high than some Western Countries and only one point lower

Position	Nation	Score	Position	Nation	Score
1	Finland	85.26	24	USA	78.86
2	Norway	84.64	25	Czech Rep.	78.45
3	Switzerland	84.61	28	Russia	77.86
4	Japan	83.44	34	Italy	75.85
5	Sweden	83.29	36	Cuba	75.55
8	Netherlands	82.18	38	Romania	74.99
11	Germany	81.55	45	Spain	72.79
13	Singapore	80.94	71	China	67.81
17	France	80.32	83	Brazil	64.51
19	UK	80.04	105	India	57.73

Table 3 Human capital index ranking

Source: World Economic Forum (2016)

than the USA. This data is important because a foreign investor has to consider that the work force in Russia is much cheaper than in Europe or in Northern America; for these two reason could be very convenient to invest in this country. Looking at the developing countries, the Russian Federation can be considered as one of the main leaders about the human capital development; in this way, the difference between other BRICS nation is very high.

The importance to have a qualified work force is directly connected with the technological development and the R&D sector. The Russian paradox is that even if there is a qualified manpower, the technological progress is high only in some economic sectors while in some other technology is not so developed. R&D and technological development is one of main factors that will help the development of small and medium size enterprises in all countries but especially in those that, like Russia, are considered as developing countries (Van de Vrande et al. 2008).

### 2.2 Low Tax Pressure

This is another important argument that can help foreign investments in the Russian Federation. Is important to underline that in particular SMEs, they have a double advantage about taxes; indeed according to the Federal law of the Russian Federation of 29.12.2014 N477-F3, since the 1st of January 2015, for 2 years all SMEs that will open in 2015 are completely exempt from paying taxes for 2 years. The following graphic shows the income tax rate and the corporate tax rate in different countries (Fig. 2).

In confront of other nation, Russia has a very low income tax rate, Switzerland, with 11.5%, is the only developed country with an income tax rate that is lower than Russian. Especially in this period of economic crisis, the possibility to operate in a country with a high-qualified work force and a low tax pressure at the same time is an important advantage especially when an investor decide to open a new SME.

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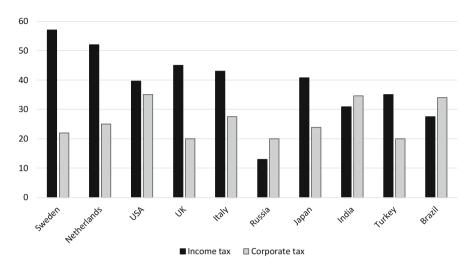


Fig. 2 Income tax and Corpora tax in %. Source: The heritage foundation (2017)

# 2.3 How Much Time Is Necessary to Open a SME

According to the World Bank, in the Russian Federation an investor can open a SME in 10 days. This value is a bit higher than for OECD members (8 days) but is the same time that people need in the Euro area. Anyway is important to underline that in 2003 investors needed 43 days to open a SME, so the government made many progresses about this theme. In Spain and Greece are necessary 13 days, in Poland 37, in Finland 14, in Austria 21, in Bulgaria 23. Looking at the BRICS countries the situation is the following: India 26 days, Brazil 80 days, China 29 and South Africa 43 days; so in Russia is faster to open a SME. Looking at developed countries, in Russia people need more days but the difference is not so high, indeed in the USA are necessary 6 days, in the UK 5 days, in Germany 11, in France 4, in Italy 7 and in Japan 11 (World Bank 2017). It is important to know that in the Russian Federation is relatively fast to open a SME because it means that an investor will not have problems with bureaucracy; anyway is also important to underline that statistics are referred to entrepreneurs that want to open a small medium business in their own country. This aspect is particularly important because as the reader will see in the following essay, one of the negative factors that do not help a foreign investor to open a SME in Russia is the problem of language.

# 3 Why Should Not Foreign Entrepreneurs Invest in Russia?

# 3.1 The Language Problem

The 86% of Russian people do not talk neither one foreign language; it is a very important problem that it is connected not only with the initial procedure to open a small medium business but it will be a high problem also for the communication with workers and customers. Moreover is important to consider that the Russian language is a difficult language, so it will not easy to learn it. Experts say that a person could need 1100 hours to learn because for who is an English Speaker.

#### 3.2 The Work Permission

According to federal law  $\mathbb{N}$  115- $\Phi$ 3 of 25.07.02, federal law  $\mathbb{N}$  129- $\Phi$ 3 of 08.08.01 and federal law  $\mathbb{N}$  477-FZ of the Russian Federation, every foreigner who wants to open an individual business or a small-medium business and work for it must have the razresheniya na vremennoye prozhivaniye [in Engl. temporary residence permission]. A foreign can invest in a SME without this document only if he will be an investor partner and he can put in the capital of the society only money (Russian Federation 2001, 2002).

The procedure to receive the temporary residence permission can be relatively short if a parent of the foreigner is Russian or is born in the Soviet Union; otherwise, it will be complicate and long because of all documents that a person has to prepare. The following table shows which documents are necessary to present the request to the commission (Table 4).

Table 4 Necessary documentations to obtain the temporary residence permission

N Type of document Description

N.	Type of document	Description
1.	Certificate of Russian Language	To obtain it the foreigner can show a certificate of Russian education (school or university). In alternative he has to make an exam that consists of: 120 multiple choice questions about language, culture and Russian law; an oral text made of dialogues and questions
2.	Registration in the Russian Federation	It is a document that proofs that the foreigner is living legally in Russia
3.	Birth Certificate	It must be in original and translated by a Russian notary
4.	Medical exams	They are different and they include—HIV and AIDS test; blood exams; drug and alcohol test; psychological test. The foreigner can make these exams only in specific public hospitals.
5.	Payment for the commission	1660 rubles that the foreigner will pay after that he gave all previous documents to the Police.

Source: Minister of Internal Affairs RF (2016)

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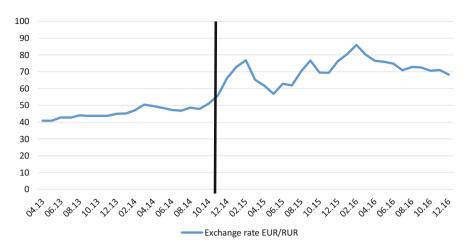


Fig. 3 Exchange rate Euro/Ruble. Source: European Central Bank (2018)

When the foreigner has all documents that are listed in the previous table, he will have to possibility to go to a committee that will judge whether the immigrant can receive permission or not. The committee meets twice a month, and there is a concrete possibility that the foreigner will have to go to the commission more than one time because there are too many requests and not enough permissions; anyway, it changes from one region to another of Russia. In conclusion, an immigrant can need also 3, maybe 4 months to make all documents that allow receiving the temporary residence permission.

#### 3.3 Sanctions

Actually, sanctions are not such big problem as before. Anyway, important to underline that actually they can represent a problem for those SME that needs to import product that are forbidden by the counter sanction made by the government of the Russian Federation as answer to the sanctions made previously by the European Union, USA and other countries as Canada and Australia. During the period 2014–2016 sanctions destabilized the exchange rate of ruble with euro and dollar. Figure 3 shows the volatility of ruble in confront of euro after sanctions.

The black stripe indicates the beginning of sanctions. In the last 5 years the minimum value was 39.00 and the maximum was 89.56; the difference max-min in the last 2 years is 37 rubles or 0.56 euro. Considering the exchange trade value of other nations as India, the difference between max and min in the last 2 years was 74-65 = 9 rupees or 0.13 euro. Moreover, the exchange trade value between Chinese yuan and euro was more stable than the ruble one; indeed the difference in the last 2 years between max and min was 7.4-6.5 = 0.9 yuan or 0.11 euro.

In the last year the ruble seems more stable than in past time, but foreigner investors are anyway worried for the stability of this value and it influences negatively the possibility for a foreigner investor to open a small-medium business in Russia.

#### 4 Conclusion

The economic system of the Russian Federation can be a good possibility for foreigner investors to open a SME in this country, although there are some factors that do not help foreign investments. In the last 10 years, the Russian government has started a process of liberalization of the economic system in order to help also foreigner investments. Indeed the level of regulation of market, according to OECD statistics, was 2.69 on 2008 but it decreased to 2.22 in 2013 (Barhatov et al. 2015). Anyway, the process has only started but it cannot be considered finished especially considering the possibility for foreigners to invest in Russia. Anyway, is also important to underline that Russia is a dynamic nation in which is very high the difference between young and old people; today in every Russian school, the English language has an important role and for this reasons in Russia there are a lot of private English school in which children go to study after school. For the public opinion today English is an important instrument for life so is very probably that in the next future the situation about foreign languages will change quickly.

The language is probably the key for investments in Russia because for those foreigners who already know Russian language will be relatively easy to open a SME. Vice versa, for who doesn't speak this language, there will be more problems not only in order of expenditure for a translator; moreover, he will have serious problems to obtain all documents that are necessary to open a small medium business in the Russian Federation.

#### References

Barhatov, V., Pletnev, D., & Campa, A. (2015). Success factors and barriers for small businesses: Comparative analysis. *Procedia – Social and Behavioral Sciences*, 221, 29–38.

Brown, D., Fay, M., Lall, S. V., Wang, H. G., & Felkner, J. (2008). Death of Distance? Economic implications of infrastructure development in Russia. *European Investment Bank Papers*, 13(2), 127–147.

European Central Bank. (2018). ECB euro reference exchange rate: Russian rouble (RUB). Accessed February 4, 2018, from https://www.ecb.europa.eu/stats/policy\_and\_exchange\_rates/euro\_reference\_exchange\_rates/html/eurofxref-graph-rub.en.html

Greenwood, M. (1997). Internal migration in developing countries. In M. R. Rozenzweig & O. Stark (Eds.), Handbook of population and family economics. Amsterdam: Elsevier Science BV. 92

Ivakhnyuk, I. (2009). The Russian migration policy and its impact on human development: The historical perspective (pp. 11–12). United Nation Developed Programme. Human Development Reports Research Paper 2009/14.

- Karachurina, L. (2015). *Migration in Russia in Q1 2015. Russian Economic Developments*. SSRN papers. Gaidar Institute for Economic Policy. Accessed April 6, 2017, from https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2640055
- Kirk, A. (2016). Mapped: Which country has the most immigrants? The telegraph online. Accessed April 8, 2017, from http://www.telegraph.co.uk/news/worldnews/middleeast/12111108/ Mapped-Which-country-has-the-most-immigrants.html
- Kumo, K. (2006). *Interregional population migration in Russia: Using an origin-to-destination matrix* (pp. 18–21). The Institute of Economic Research, Hitotsubashi University.
- Lovell, S. (2006). Destination in doubt. Russia since 1989 (Global History of the present). London: Zed Books.
- Minister of Internal Affairs RF. (2016). Statisticheskiye svedeniya po migratsionnoy cumyauuu [Statistical information on the migration situation]. Accessed April 7, 2017, from https://xn% 2D%2Db1aew.xn%2D%2Dp1ai/folder/101762/item/10888941/
- Mottaeva, A. (2015). Primeneniye elearning tekhnologiy v obrazovatel'nom protsesse: real'nost' i perspektivy [Application of elearning technologies in the educational process: Reality and prospects] (pp. 233–236). The science of young people the intellectual potential of our time, Moscow, 29–30 April 2015.
- Nummela, N. (2011). *International growth of small and medium enterprises*. New York: Routledge.
- OECD. (2016). Perspectives on global development 2017: International migration in a shifting world. Paris: OECD.
- Russian Federation. (2001). Federal'nyy zakon ot № 129-Φ3 08.08.01 [Federal law № 129-Φ3 of 08.08.01]. Accessed February 20, 2017, from http://kremlin.ru/acts/bank/39255
- Russian Federation. (2002). Federal'nyy zakon ot № 115-Φ3 25.07.02 [Federal law № 115-Φ3 of 25.07.02]. Accessed February 20, 2017, from http://kremlin.ru/acts/bank/39255
- Russian Federation. (2014). Federal'nyy zakon ot 29.12.2014 g. № 477-FZ [Federal law of 29.12.2014 g. № 477-FZ 2]. Accessed February 20, 2017, from http://kremlin.ru/acts/bank/19638/print
- The Heritage Foundation. (2017). *Index of economic freedom 2017*. Accessed April 7, 2017, from <a href="http://www.heritage.org/index/explore?view=by-variables">http://www.heritage.org/index/explore?view=by-variables</a>
- United Nations. (2015). International migration wallchart 2015. Accessed April 7, 2017, from http://www.un.org/en/development/desa/population/migration/publications/wallchart/docs/ MigrationWallChart2015.pdf
- Van de Vrande, V., De Jong, P. J., Van haverbekec, W., & De Rochemontd, M. (2008). Open innovation in SMEs: Trends, motives and management challenges. *Journal Technovation*, 29 (6–7), 423–437.
- Vestnik gosudarstvennoy registratsii. (2017). Statistika individual'nykh predprinimateley [Statistic of individual entrepreneurs]. Accessed April 2, 2017, from http://www.vestnik-gosreg.ru/info\_ip/?tab=commonAll&citizenship=4
- World Bank. (2017). *Time required to start a business (days)*. Accessed April 8, 2017, from https://data.worldbank.org/indicator/IC.REG.DURS?year\_high\_desc=false
- World Economic Forum. (2016). *Human capital index, the Russian Federation*. Accessed April 8, 2017, from http://reports.weforum.org/human-capital-report-2016/economies/#economy=RUS

# Part II Accounting

# **Ethical Accounting: The Driver in Recovering Markets**



Sandeep Goel

**Abstract** The unethical behavior by accounting professionals and corporate managers and the resulting growing epidemic thereof is a topic of increasing concern for the regulators and standard-setters worldwide. This assumes significance on account of the recovering phase of economies since global meltdown in 2008. Ethics are a key area of concern in accounting at present on account of series of corporate scandals that have taken place in the world questioning the credibility of the accounting profession and management behavior. The present paper deals with the concept of ethical accounting and highlights the relevance of "ethical" (quality) aspect of accounting (earnings) in financial reporting practices of the corporate. It further discusses its implications on the role of accounting professionals for corporate reporting and the regulatory machinery for its promotion.

**Keywords** Accounting · Ethics · Quality · Earnings · Shareholders

#### 1 Introduction

Agency theory (Jensen and Meckling 1976, p. 311) states that 'the firm is a legal fiction which serves as a focus for a complex process in which the conflicting objectives of individuals... are brought into equilibrium within a framework of contractual relations.' This agency framework promotes a self-serving behavior by the management and tempts them to report discretionary financial numbers and thus, leading to unethical or poor quality accounting.

Schipper (1989) propounds that the informational perspective is a key element underpinning the study of creative accounting phenomenon. The managers may choose to exploit their privileged position for personal gain, by reporting the financial numbers in their own favor. Creative accounting is a process of manipulating the numbers by accountants in financial statements to report the desired figures

S. Goel (⊠)

of business. It is also referred to as Earnings management. Goel (2014) draws attention to the quality aspect of reported numbers in corporate enterprises in India.

It may be difficult for individual stakeholders to notice the effect of accounting manipulation due to lack of professional competence. That's why ethical accounting (earnings) becomes crucial in such context, particularly on account of growing shareholders awareness for fair and ethical accounting practices by the corporate. The contribution of the present study lies in the fact that it positions the informational perspective of the financial reporting process which is often misused by the corporate for numerous reasons with the help of professional accountants. The paper stresses on the relevance of ethical accounting by the corporate and practitioners and quality of financial reporting.

# 2 Ethical Accounting

Ethical accounting refers to quality reporting by the corporate enterprises with the help of accounting professionals which is fair and transparent. Simply put, it implies zero creative accounting. Cohen (2003) defines accounting quality as 'earnings quality, i.e. the degree of accuracy of accounting numbers in depicting the financial health of a business and determining the future operating cash flows. Reliability is a critical factor of financial reporting quality. According to Cheung et al. (2010), reliability is analyzed based on the qualities of faithful, verifiable, and neutral information. Gajevszky (2016) highlights the relevance of quality of the financial reporting process for sound corporate governance.

Ethical accounting is an alarming issue because of corporate scams happening every now and then, leading to erosion of shareholders' wealth. These corporate scandals question the morality of corporate in general and accountants in particular. It is argued that the accountants are majorly responsible for the decline in ethical accounting practices of a business. The accountant's role is to provide useful information to various stakeholders about the economic affairs of an entity in which they have an interest. This creates conflicting interests for accountants as well. For example, it is the responsibility of an accounting firm, appointed by a company for preparing financial statements, to provide accurate information to shareholders and other users, even the information affects the clients' interests. Enron and WorldCom around 2000 and Satyam in 2008 highlighted the importance of ethical reporting, audit quality and governance for improving public confidence in financial reporting.

Ethics refers to a code or moral system that helps you in deciding right and wrong. The word 'ethics' is derived from the Greek word 'ethos' (character) and Latin word 'moras' (customs). These two words combined together define the interaction between individuals. Thus, ethics expresses how people behave for making the 'right' choice and leading to 'good' behavior. Fleet (1991) defines Ethics as the standards or morals set by a person himself about right or wrong. Nwakpa (2010) proposes that ethical behavior is a desired conduct or moral or legal behavior,

whereas unethical behavior is nothing but the bad behavior, or in extensive form, an illegal act punishable by law.

#### 3 Ethics and Professional Practice

The accounting professionals need to demonstrate highest level of ethical standards in their practices on account of the professional requirement. They have to be fair and transparent in their behavior to all the stakeholders, particularly potential investors who rely on their professional judgment and make their decisions. These decisions in turn affect the resource allocation process of an economy. According to Bayat (2008), professional ethics in accounting and audit is the subset of business ethics and business ethics is the subset of morality in economic life. There is absolutely no room for unethical behavior in the professional world. This becomes critically important for listed companies in the interests of shareholders. Therefore, the professional accounting bodies have developed a code of professional conduct, rules or standards for ensuring the ethical behavior by the accounting practitioners. These rules form the basis of professional ethics for accounting practices globally.

According to Keeler (2009), "Greed and fear"—the two most powerful forces in modern capitalism. They have pervaded the social system, especially the financial sub-system in most economies of the world. Greed on the part of corporate management, and fear on the part of professionals are typical examples. The accountants' involvement with large corporate frauds in all times reflects that they have not demonstrated an ethical behavior in their relationship with the corporate. They are too much driven by the "corporate greed" and ultimately end up a ginny—pigs in their hands. There are multiple reasons, such as job security, compensation, survival and growth. They focus too much on the end-result, rather than ethical side of accounting. This leads to 'earnings management', i.e. window-dressing which ultimately leads to wrong decision-making by the stakeholders.

Let us explore a situation wherein, you have recently been employed as an accounting executive by an MNC. One of your responsibilities is to help in the preparation of financial statements of the company. The company's major lending bank, International Savings Bank, requires quarterly financial statements, ending June 30, 2015. During the month of May, the company spent INR 80,000 on a promotional campaign for one of their products. This total cost was shown as promotional expense. The company's Director-Finance tells you to remove this cost from Income statement and instead to treat this as a 'development expense' in the Position statement ending June 30. This results in a better financial strength of the company to the bank. In this case, there are no laws broken or ethical lines crossed by a company and discretion is exercised by the management in reporting an item for one of the stakeholders, i.e. the bank. This refers "creative accounting." However, it is the accountant's ethical duty to project accurate information to the stakeholders.

# **4 Unethical Accounting Practices**

Unethical accounting includes all layers of mismanagement of accounting numbers, ranging from 'earnings management' to 'financial frauds.' It could be misrepresentation of figures or the deliberate act of non-disclosure of complete information in the financial reports. This designing is usually done by employing a series of bookkeeping transactions within the generally accepted accounted principles. The objective of aforesaid manipulative practices could be personal benefit of the management or market pressure or contractual restrictions. Following are common unethical accounting practices.

# 4.1 Misappropriation of Assets

This is a very common practice, violating the accounting principle of 'business entity.' A business owner uses business assets for personal use, presuming they are his own. An accountant treats the use of business goods for personal needs as a drawing which is an implied loan to the owner. It must be paid back to the business. But, usually these corporate practices are deliberately overlooked in financial reporting. According to the Report to the Nation on Occupational Fraud and Abuse (ACFE 2008), asset misappropriation can be classified into different scheme, such as: skimming, cash larceny, fraudulent disbursements, and noncash larceny and misuse.

# 4.2 Premature Revenue Recognition

Recognition of revenue before it has occurred by the business is another common unethical accounting practice. According to Marquardt and Wiedman (2004), influencing the revenue recognition process is another way of earnings management. The recognition decision is based on the principle of 'transfer of ownership' which in turn depends on a critical event in the earnings cycle and ignoring this fact and recording revenue mere to boost sales figures doses not go well with regulators. Early recognition implies that the amount of revenue recognized is still highly uncertain because many risks have not yet been resolved. This is often done by the corporate to meet a pre-determined sales figure or to satisfy the lenders.

### 4.3 Channel Stuffing

This is a business practice in which company sends more inventory to its sales partners than could be sold by various means of discounts, deferred payment terms, etc. Channel stuffing temporarily boosts the accounts receivable for the company, but it always has the probability of sales returns. This ultimately deflates the value of the company's sales.

Raymond and Stempel (2014) states that Monster Beverage Corp (the energy drink maker) had to settle a \$16.25 million charge with shareholders as they overstated the gains out of a distribution arrangement with Anheuser-Busch. There was an evidence of "channel stuffing" in the company's' results, wherein they made Anheuser distributors to sell too many drinks despite the fact that Anheuser had "practically abandoned" distribution of the said product line. This was around a year's inventory.

#### 4.4 Cookie Jar Reserves

Cookie jar creation is another significant manipulative accounting practice that is employed by the corporate executives to create cash reserves in good years. This is used to offset poor earnings in bad years. The outside world gets convinced by those earnings and carries an impression that the company is consistently achieving its goals. Sweeney (1994) highlights that cookie-jar reserves involve both decreasing and increasing earnings. A common form of cookie jar treatment is to "recognize" a liability without its occurrence. For example, company executives may keep aside INR 50,000 for bad debts provision. The bad debts provision is shown as a liability in the balance sheet. Since these bad debts are never going to materialize, this amount is then recorded as income, ultimately inflating the company's net profit by the said amount.

The Economist (2010) states, "Dell was found by SEC maintaining "cookie-jar reserves" using Intel's money. According to SEC, Dell would have missed the earnings" forecast done by the analysts in every quarter between 2002 and 2006. This included a deal with Intel, a big microchip-maker. Under the deal, Dell had agreed to use Intel's central processing unit chips exclusively in its computers for which the payments were not disclosed. This leads to a penalty of \$100 m for Dell."

# 5 Consequences of Unethical Accounting

Unethical accounting practices, as mentioned above, are motivated by multiple reasons of bonus, job pressures, financing or market pressures. They might not be always illegal, but they do have an adverse effect on the business in particular and

society in general. In the short run, these harm the company's image and in the long run they can lead to complete erosion of shareholders" confidence in the company, leading to its close down. The long-term negative consequences as an outcome of these unethical practices can be discussed as follows.

#### 5.1 Civil and Criminal Penalties

If company management is unethical to the point of financial fraud, the company could be subject to civil and criminal penalties. Healy and Wahlen (1999) describes how standard setters should decide on the accounting standards for reducing the possibility of earning management. There are fines and imprisonment for deliberately concealing and misleading the financial information under various Acts of SOX (US), SEBI Act (India), etc. For example, the investors of the company can successfully sue the company and its owners under *Indian Companies Act 2013* in the form of "class-action suit." Similar provision is there in various other countries as well. So, business owners should exercise caution, as ignorant of accounting practices and standards is not a defense for fraudulent reporting.

#### 5.2 Loss of Reputation

If you operate your business in an unethical manner, it will definitely spread out. The customers would rather buy products of businesses that operate ethically, and support their communities. If your company does not operate ethically, customers and suppliers may not like to conduct business with you. Eventually, this destroys your business. Karpoff et al. (2008) discovers that for such businesses, the highest penalties are imposed by the market.

# 5.3 Loss of Human Capital

It's difficult to get good people work for you in today's world. Many good employees do not want to work for a company that is unethical. Kranacher et al. (2011) stresses upon the fact that losses arising from indirect costs, such as loss of productivity, adverse impact on employees' moral and others should also be considered as they also result from financial statements fraud. The accounting work needs to be performed ethically. If you pressure company accountants to behave unethically, they would not be able to uphold the standards of their profession, and they might risk loss of their license or credentials. Reputed accountants will not work for a company with unethical behavior.

#### 6 A Case Study on Ethical Accounting Decision

The following case provides an example of 'ethical accounting vs. unethical accounting' by accounting professionals. Royal Corporation was one of the leading construction giants in Asian continent with headquarter in Mumbai, India. Aman Sharma joined Royal Corporation as accounts executive 10 year ago. Within a short span of less than 10 years, he moved to Financial Controller of the company. The company has shown a promising financial performance for last couple of years. But, Aman was expecting a downfall in net income of the company this year. As a result, he was afraid that top management might recommend cost reductions by laying off accounting staff.

He was under a tremendous pressure as his job was also at stake; being linked to performance benchmark of previous year. He came out with a plan of designing the accounting numbers in the financial statements to please the management. He knew that it was unethical but decided to go ahead with this. He was aware that depreciation is a major expense for the company. The company currently uses the straight line method of deprecation, and he thought of changing to written-down value method.

This would decrease depreciation expense (and increase income). The best part of this adjustment was prospective effect and this would not be highlighted in the current or future years' financial statements. This approach seemed to be more feasible to him for saving his job and the staff.

However, this change would be highlighted in the position statement under retained earnings as a cumulative effect adjustment. The management would have to justify this change to stakeholders that it will give a more accurate picture of the usage of assets in the financial statements.

So, on one hand Aman has an obligation to protect his skin and his staff and on the other hand, opting for sudden change in the method of depreciation could raise a question mark on the company's reporting integrity. This may not go well with the stakeholders and ultimately it might get revealed. Thus, creative accounting falls under unethical accounting domain.

# 7 The Regulation

Coglianese et al. (2004) states that prior to 1929, there were no official standards for accounting practices and ethics. The accountants were not obligated to disclose profits and losses of companies, and were accountable to their employer corporation. The need for corporate financial accounting initially gained momentum after the stock market crash in 1929 as during that time corporate financial statements were often not audited. Further, accounting conventions were in practice rather than the accounting rules.

That's how the idea of setting official standards for accounting got originated in the light of the 1929 stock market crash and the Great Depression. This resulted in the establishment of the United States Securities and Exchange Commission.

#### 7.1 Code of Ethics for Professional Accountants

International Federation of Accountants (IFAC) had long recognized the need for developing, promoting, and enforcing international recognized standards for providing credible information to the investors and other stakeholders and protecting their interests.

IFAC lays down the structures and processes for supporting the four independent standard-setting boards: the International Auditing and Assurance Standards Board (IAASB), the International Accounting Education Standards Board (IAESB), the International Ethics Standards Board for Accountants (IESBA), and the International Public Sector Accounting Standards Board (IPSASB).

These independent standard-setting boards are responsible for developing and ensuring the high-quality standards in a transparent, efficient, and effective manner. These boards issue the following pronouncements:

- · Code of Ethics for Professional Accountants
- International Standards on Auditing, Review, Other Assurance and Related Service
- · International Standard on Quality Control
- International Education Standards
- International Public Sector Accounting Standards

According to International Ethics Standards Board for Accountants (2012), the Code of Ethics for Professional Accountants (the Code) issued by the International Ethics Standards Board for Accountants (IESBA) has been effective since January 1, 2011.

# 7.2 Sarbanes-Oxley Act

The Sarbanes Oxley Act (SOX) of 2002 is another powerful Act that regulates corporate behavior in the United States of America (U.S.A). It came out as a result of several large corporate scandals in the country. This Act was a means to protect the public from unethical accounting practices. Koestenbaum et al. (2005) explains that SOX provided a multifaceted approach to embrace ethics in corporate, focusing on (i) Process compliance and the price of non-conformance, (ii) Behaviors and attitudes throughout the organization, and (iii) The role of leadership. The Securities and Exchange Commission (SEC), in compliance with the Sarbanes-Oxley Act of 2002, requires a company to disclose whether it has adopted a code of ethics.

#### 7.3 Accounting Code of Professional Conduct

The American Institute of CPAs outlines an AICPA Code of Professional Conduct for accounting professionals. The code provides general guidance on professional responsibilities, the public interest, integrity, objectivity and independence, and the nature and scope of their services. There must be a clear understanding between independence and objectivity at the time of providing services to the clients.

### 7.4 Clause 49 of the Listing Agreement

The stock market regulator in India, the Securities and Exchange Board of India (SEBI) implemented Clause 49 of the Listing Agreements in 2003 which finally came into effect in 2005. The Clause 49 is considered as a milestone in the evolution of corporate governance practices in India. Besides other features, it also stressed on 'disclosures by the company.'

Grant Thorton (2014) has stated in their report, "the Securities and Exchange Board of India ("SEBI"), vide its circular dated 17 April 2014, had issued certain amendments to Clause 49 of the Listing Agreement. These amendments followed the overhaul in the corporate governance norms under the Companies Act, 2013 and the related rules notified on 27 March 2014 (together, the "2013 Act")."

# 7.5 Companies Act, 2013

The new Indian Companies Act, 2013 is a proposition to improve corporate governance system in India on account of corporate scams and failures in the past. Under this Act, significant corporate governance reforms have been recommended primarily to improve the board process.

(As mentioned on the MCA 2013), On Auditors' front, the limit of the maximum number of companies in which a person may be appointed as auditor is fixed at 20. Their appointment for 5 years shall be subject to confirmation at every annual general meeting.

# 8 How to Promote Ethics in Accounting?

Promoting ethics is not a solution but inculcating ethics in the value system is the solution. It's all in culture.

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Company	Industry	Country
ABB Asea Brown Boveri Ltd	Electrical equipment	Switzerland
Accenture	Business services	Ireland
Baptist Health South Florida	Healthcare services	USA
Capgemini	Business services	France
Colgate-Palmolive Company	Consumer products	USA
Dun & Bradstreet	Business services	USA
Kellogg Company	Food and beverage	USA
Microsoft Corporation	Computer software	USA
Tata Steel Ltd	Metals and mining	India
Wipro Ltd	Computer software	India

**Table 1** 2013 World's most ethical companies

Source: Smith (2013)

**First**, the value system of human beings has to be strengthened. This does not include only accounting professional or corporate executives but the society in all and it has to start right from his childhood.

**Second**, as discussed earlier the two most important factors for unethical behavior—'greed' and 'threat' should be dealt with strongly. Strong regulatory mechanisms, enforcement of standards are an easy approach to fight with this greed. Equitable distribution of income in the society is the best measure to reduce the gap between haves and haves not for dealing with the threat factor.

The World's most ethical companies as mentioned in Table 1 have been leaders of their respective industries on criteria, such as approach of the top, employee well-being, compliance parameters. This strong quality culture of is also key to their increasing financial performance. Table 1 lists world's leading ethical companies of 2013 in an alphabetical order.

#### 9 Conclusion

The accounting and corporate professionals are responsible to the firm and the public for maintaining a high standard of ethical performance, as set out in their various codes of professional ethics and good corporate governance. The professional ethics are not simply a compliance of a few rules; rather it goes beyond the written code. The ethical behavior has to be in spirit not in letter.

One important lesson from recent cases of corporate scams is that the unethical behavior is not only immoral in business sense but is also disastrous for the economy. 'We cannot have business people lying, stealing, perpetrating frauds, and making up accounting rules as they go without seriously disrupting business' (Hilton 2005). Thus, according to him, ethical behavior by business people in general, and accountants in particular, is not a luxury or a discretionary 'good

thing to do'. It is an absolute necessity to the smooth functioning of the economy. So, ethical accounting is the backbone of any business and the nation.

Based on the foregoing discussion, the following recommendations will encourage ethical behavior by accounting professionals and motivate ethical accounting:

- Relevant professional bodies should review their codes and regulations at regular intervals in the light of changing global practices.
- Widespread enlightenment about these codes among the members needs to be encouraged and strict penalty for professional misconduct should be levied.
- Accounting professionals need to be fully aware and conscious of the values and goals regarding the nature of their job.
- Strong whistle-blowing and/or ethical concerns procedure must be set up by corporate for discouraging internal unethical practices.
- Ethics training programs should be provided to all the accounting executives as a part of orientation on the job.

#### References

Association of Certified Fraud Examiners. (2008). Report to the nation on occupational fraud and abuse. Austin.

Bayat, Q. (2008). Professional ethics in accounting and audit. *Account Journal*, 204–205, 54–61. Cheung, E., Evans, E., & Wright, S. (2010). An historical review of quality in financial reporting in Australia. *Pacific Accounting Review*, 22(2), 147–169.

Coglianese, C., Healey, T. J., Keating, , E.K., & Michael, M. L. (2004). *The role of government in corporate governance* [online]. Accessed December 16, 2016, from http://www.hks.harvard.edu/m-rcbg/research/rpp/reports/RPPREPORT8.pdf

Cohen, D. (2003). Quality of financial reporting choice: Determinants and economic consequences. Working Paper, New York University [online]. Accessed December 20, 2016, from <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.551.8406&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.551.8406&rep=rep1&type=pdf</a>

Fleet, D. D. V. (1991). Contemporary management. Boston: Houghton Mifflin's Co.

Gajevszky, A. (2016). Do specific corporate governance attributes contribute to the quality of financial reporting? Evidence from Romania. *Journal of Economics Business and Management*, 4(1), 15–22.

Goel, S. (2014). The quality of reported numbers by the management: A case testing of earnings management in corporate India. *Journal of Financial Crime*, 21(3), 355–376.

Healy, P. A., & Wahlen, J. M. (1999). A review of the earning management literature and its implication for the standard setting. *Accounting Horizons*, 18(4), 365–384.

Hilton, R. W. (2005). *Managerial accounting – creating value in a dynamic Business environment* (6th ed.). New York: McGraw-Hill/Irwin Inc.

International Ethics Standards Board for Accountants. (2012). Handbook of the code of ethics for professional accountants. Accessed December 20, 2016, from http://www.ifac.org/sites/default/files/publications/files/2012-IESBA-Handbook.pdf

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 311.

Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The cost to firms of cooking the books. *Journal of Financial and Quantitative Analysis*, 43, 581–611.

Keeler, D. (2009, April). Global finance magazine. Global Finance Media, Langhorne, PA

- Koestenbaum, P., Keys, P. J., & Weirich, T. R. (2005). Integrating Sarbanes-Oxley, leadership, and ethics. CPA Journal, 75(4), 13.
- Kranacher, M. J., Riley, R. A., Jr., & Wells, J. T. (2011). Forensic accounting and fraud examination. New York: Wiley.
- Marquardt, C., & Wiedman, C. (2004). How are earnings managed? An examination of specific accruals. *Contemporary Accounting Research*, 21(2), 461–491.
- Nwakpa, P. (2010). Causes and control of unethical behaviors in tertiary institutions in Nigeria. *Academic Scholarship Journal*, 2(1), 8–16.
- Raymond, N., & Stempel, J. (2014). Monster beverage in \$16.25 million 'channel-stuffing' settlement. Accessed October 20, 2016, from http://articles.chicagotribune.com/2014-04-17/business/sns-rt-us-monsterbeverage-lawsuit-20140417\_1\_monster-beverage-monster-energy-monster-shares
- Schipper, K. (1989). Commentary on creative accounting. Accounting Horizons, 3(3), 1–102.
- Smith, J. (2013). *Ethisphere* [online]. Accessed October 10, 2012, from http://www.forbes.com/sites/jacquelynsmith/2013/03/06/the-worlds-most-ethical-companies-in-2013/
- Sweeney, A. (1994). Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics*, 17, 281–308.
- The Economist. (2010). *Taking away Dell's cookie jar* [online]. Accessed October 24, 2016, from <a href="http://www.economist.com/blogs/newsbook/2010/07/dells\_sec\_settlement">http://www.economist.com/blogs/newsbook/2010/07/dells\_sec\_settlement</a>
- The MCA. (2013). *Companies Act, 2013* [online]. Accessed December 16, 2016, form http://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf
- Thornton, G. (2014). *Strengthening corporate governance* [online]. Accessed October 24, 2016, from http://www.grantthornton.in/assurance-tax-regulatory-framework/amendments-to-clause-49-strengthening-corporate-governance

# History of the European Accounting Directives Review: Analysis of the Public Consultation Results



Gabriele D'Alauro

Abstract Approval of the new European Accounting Directive followed a long standard-setting process, characterized by a public consultation held in 2009 through a Ouestionnaire submitted by the European Commission as part of the project to simplify EU accounting rules. This paper analyses the comment letters received by the European Commission with a twofold aim: first, to evaluate whether there are significant differences among Country groups and respondent categories, and second to verify the acceptance level of the constituents' opinions in the subsequent European Commission's review proposal and in the European Parliament and Council's final decisions. Confirming our hypotheses, results show a significant diversity among respondents. In particular, only German-speaking Countries favor eliminating significant disclosure and publication requirements. Anglo-Nordic Countries agree on increasing simplification options and information freedom, whilst Latin Countries are more oriented towards a rule-based approach. Concerning respondent categories, preparers show more appreciation for a significant reduction of mandatory disclosure with respect to users and public authorities. In any case, the proposal for a new Accounting Directive presented by the European Commission, as well as the final Directive, though apparently supporting the 'user primacy' principle, seems not to consider adequately all the needs emerging from the public consultation.

**Keywords** Accounting Directives  $\cdot$  European Questionnaire  $\cdot$  Standard setting  $\cdot$  Country groups  $\cdot$  Respondent categories  $\cdot$  International differences

#### 1 Introduction

Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with the new European Accounting Directive 2013/34/EU (European Parliament and Council 2013) by 20 July 2015, so enabling first-time applications of these provisions to financial statements for financial years beginning on 1 January 2016 or during the calendar year 2016. The final approval of the Directive, which replaces the Fourth and Seventh Company Law Directives, followed a long standard-setting process, characterized by a public consultation held in 2009 through a Questionnaire on a review of the Accounting Directives.

The present study analyses the answers to the Questionnaire, submitted in 2009 by the European Commission as part of the project to modernize and simplify the accounting rules of the European Union, including in particular a reduction of administrative burdens mainly for small enterprises. Additional key objectives of this review were to increase the clarity and comparability of financial statements, and protect users' accounting information levels (European Commission 2011a).

The review of the Accounting Directives, based on the answers given by respondents to the official Questionnaire from the European Commission, has a twofold aim: first, to evaluate whether there are significant differences among Country groups (Anglo-Nordic, German-speaking and Latin groups) and respondent categories (users, preparers, public authorities, accountants and auditors), and second to verify the acceptance level of the constituents' opinions in the subsequent European Commission's review proposal and in the European Parliament and Council's final decisions.

Our research method examines the answers to the Questionnaire's 37 questions and tests several hypotheses regarding the presumed differences among respondents in the light of the literature relevant for our study. We investigate more than 100 completed questionnaires received by the European Commission. Our results show that there is a marked difference between users and preparers as well as between Countries on many of the subjects included in the Accounting Directive review process. A post-review analysis also shows that the proposal for a new Accounting Directive and the ensuing final Directive seem not to consider adequately all the needs emerging from the public consultation.

At a theoretical level, as the European Accounting Directives review was characterized by the proposal for a simplification for small entities of the general rules applied to larger firms, our research also integrates the international-wide debate on so-called 'differential reporting' (Walton 2015) and by analyzing related informational needs (Di Pietra et al. 2008), illustrates the opinions and the demands of both users and preparers, as well as accountants, auditors and public authorities, in the European Union.

Consistent with the discussion in the European academic literature and the results of previous related studies (Joos and Lang 1994; Haller 2002; Nobes 2011; Quagli and Paoloni 2012; Quagli et al. 2015), our empirical analysis confirms both acrossand within-country diversity, showing that the differences across Europe have not

been significantly reduced by the adoption of the Accounting Directives, hence European accounting harmonization remains an elusive goal (Alexander 2015; Venuti 2012).

The distinguishing feature of this paper is its focus on the public consultation promoted by the European Commission—as it represents a significant phase of the European Accounting Directives review—with particular reference to the analysis of the results and the effects of the related Questionnaire as a whole, so investigating and extending a previous study regarding only a part of the Questionnaire (Quagli et al. 2015).

The European Regulator had to make significant choices among different preferences and needs arising from stakeholders categories. In this context, the consequent proposal for a new Accounting Directive, presented in 2011 by the European Commission also following up public consultations on other issues in particular concerning the IFRS for SMEs, as well as the consequent final Directive definitely approved in 2013, seems to confirm the "user primacy" principle.

The paper proceeds as follows: Sect. 2 summarizes the structure of the European Commission Questionnaire; Sect. 3 poses the research questions and related literature; Sect. 4 describes the methodology used to select responses for examination. In Sect. 5 we analyze the responses and show our results. Section 6 describes the European Commission proposal for a new Accounting Directive, the consequent amendments and the final text of the Directive. Finally, Sect. 7 discusses limitations of the research and conclusions.

# 2 Structure of the European Commission Questionnaire

The European Commission Questionnaire on the public consultation of the review of the Accounting Directives took place between 26 February 2009 and 30 April 2009. The objective of this consultation was to gather the view of European Union stakeholders on several proposals to modernize and simplify the 30-year-old Accounting Directives.

The Questionnaire is made up of 37 questions: 25 questions are asked for "yes/no" responses with reference to specific issues, while the other 12 questions basically concern requests for descriptive comments.

In short, as shown in Table 1, the 25 "closed questions" refer to the following macro-topics: basic principles, structure of rule approach, company categories, elements of annual accounts, publication requirements of financial statements, layout requirements of financial statements, valuation issues, structure of the two current Accounting Directives and their possible integration.

As regards the aims of our study, focused on analysis of the answers to these closed questions, it is useful to group the issues in a homogeneous way. In particular, we propose a classification founded on the key element of the Questionnaire, namely the level of corporate disclosure required. Consequently, we categorized each question based on whether the proposal implies an increase (information

Table 1 Questions asked for "yes/no" responses—topic and groups

Торіс	Group*	Macro-topic	Question No.
Concentration of basic principles in one dedicated section	C2	Basic principles	1
Creation of a bottom-up approach	B1	Structure	3
Appropriateness of current rules for small, medium and large companies	C3	Company categories	4
Agreement on current criteria for company categories	C3		7
Agreement on current thresholds for company categories	C3		8
Approval of a reduction of the number of company categories	C1		9
Agreement on other approaches to reduce the number of company categories	N		10
Agreement on eliminating the requirement for annual reports for medium companies	B2	Elements of annual accounts	11
Agreement on requiring cash-based information	A	1	12
Agreement on requiring a minimum layout of the cash-flow statement	A		13
Only for preparers—Provision of a cash-flow statement in the past years	N		14
Only for bank or credit provider—Usefulness of a cash-flow statement	N		15
Requirement in own jurisdiction to provide a cash-flow statement	N	Publication requirements	16
Agreement on exempting small companies from the requirement to publish accounts	B2		17
Agreement on option for small companies to prepare only abridged accounts	B1		18
Agreement on developing one XBRL taxonomy at the EU level	C1		21
Agreement on keeping prescriptive formats for the balance sheet and the p&l account	B1	Layout requirements	22
Agreement on reducing the number of available layouts	C1		23
Agreement on providing for only a minimum structure for balance sheet and p&l account	B1		24
Agreement on removing the separate line items for extraordinary effects	B2		27
Only for users—Usefulness of the extraordinary item	N		28
Agreement on potential for modernization and simplification in the area valuation rules	C2	Valuation issues	32
Agreement on integrating the 7th Directive into the 4th Directive	C2	Creating one Accounting	34
Agreement with the need for amendments or modernization of the 7th Directive	C2	Directive	35
Agreement with the need to streamline the terminology of the Directives	C2		36

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Table 1	(continued)
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Торіс	Group*	Macro-topic	Question No.
Total number of questions considered			25
*Group classification		Number	
A = information strengthening		2	
B = information weakening			
B1 = broader information freedom	4		
B2 = elimination of information requirements		3	
C = innovation			
C1 = reduction of alternative options or categories	es	3	
C2 = amendment of directive format		5	
C3 = degree of satisfaction with current rules	3		
N = none		5	
Total number of questions		25	

strengthening) or a decrease (information weakening) of required information when compared to the current Directives, or concerns other innovations. However, it should be added that information strengthening does not necessarily imply an improvement of the quality of corporate disclosure.

Our reclassification of questions is as follows:

- Group A: proposals for information strengthening;
- Group B: proposals for information weakening, divided into:
  - Group B1: proposals for broader information freedom;
  - Group B2: proposals for elimination of information requirements;
- Group C: proposals for other innovations, divided into:
  - Group C1: proposals for reduction of alternative options or categories;
  - Group C2: proposals for amendment of directive format;
  - Group C3: check of degree of satisfaction with current rules.

Table 1 provides a description of all the topics for each of the questions examined and a specification of the corresponding classification based on the aforementioned groups. In line with the main aim of the European Questionnaire, we note that the majority of questions concerns issues promoted in order to reduce informative and administrative burdens or to simplify corporate accounting rules. The proposals to stress required disclosure only pertain to a single subject, i.e. cash-flow information (Question, hereafter "Q", 12 and Q13). We point out that so far cash-flow information has not been made mandatory by the European Directive, contrary to IAS requirements.

Finally, some questions, owing to their particularly specific nature—among them those for only one respondent category (Q14, Q15 and Q28), plus a question regarding agreement on other approaches for the reduction in the number of

company categories (Q10), and a question on the requirement in own jurisdiction to provide a cash-flow statement (Q16)—have not been included in any of the groups.

As discussed below (see in particular Sect. 6.1), the responses to the Questionnaire are commented on by the European Commission in the "Summary Report of the Responses Received to the Working Document of the Commission Services (DG Internal Market) Consultation Paper on Review of the Accounting Directives" (European Commission 2009b), hereafter "Summary Report". However, this Report is neutral and does not take a position on the answers received, underlining that the results of the review do not commit the Commission to future action (European Commission 2009b).

#### 3 Theoretical Background and Research Questions

We focus on the responses to the European Commission Questionnaire firstly to understand the position of European Union stakeholders towards the current European accounting rules and, secondly, to examine the presumed differences among respondents in the light of the review of the Accounting Directives.

The first research question is to check whether the Countries where respondents operate have an influence on their answers regarding the various issues raised by the European Commission. In this way, we are also in a position to test the validity of the concepts of international groups.

The initial hypothesis is that a positive evaluation of a relaxation of mandatory information requirements, founded on a broader informational freedom for companies, will be found most of all in the Anglo-Nordic respondents, due to their cultural tradition of greater transparency in financial statements based on a "principle-based" approach, with a lighter role of formal rules, and on the prevalence of substance over form (Nobes 1983).

From the perspective of reducing disclosure burdens, the German-speaking class is presumed instead to express a generally positive view towards the real elimination of information requirements, on the basis of statements issued by several German representatives in the European Parliament, mainly with reference to the opinions in favor of eliminating mandatory annual reports for 'micro-entities' (European Parliament 2010).

On the other hand, we assume that Latin respondents support more prescriptive measures and an increase of required information, as their cultural tradition is more oriented towards a rule-based approach (Joos and Lang 1994).

So we can formulate the following hypotheses.

H<sub>1a</sub>: Anglo-Nordic respondents are more inclined than others to allow broader information freedom for companies.

 $H_{1b}$ : German respondents are more inclined than others to eliminate information requirements for companies.

 $H_{1c}$ : Latin respondents are more inclined than others to increase required information for companies.

The second research question concerns the analysis of respondent orientation vis-à-vis their category, applying—as the European Summary Report did—the classification of preparers, users, accountants and auditors, public authorities.

It is expected that users are not in favor of a decrease in corporate disclosure, mainly in the form of proposals for eliminating information requirements, since this could compromise their ability to acquire useful data, for instance, in order to assess and compare alternative investments (Sinnet and De Mesa Graziano 2006). On the contrary, preparers are likely to favor a significant reduction of mandatory disclosure and the lower administrative burdens this implies (Gallup Organization 2007). Moreover, we presume that public authorities hope to get more available data for regulatory and control purposes. Overall, we hypothesize that accountants and auditors support the proposals of change that could lead to an increase of companies' requests for their consulting services.

We can therefore formulate the following hypotheses.

 $H_{2a}$ : Users are less inclined than others to eliminate corporate information requirements.

H<sub>2b</sub>: Preparers are more inclined than others to decrease corporate mandatory disclosure.

H<sub>2c</sub>: Public authorities favor increasing corporate available data.

H<sub>2d</sub>: Accountants and auditors are favorable to changes increasing their consulting services.

Looking at the literature relevant for our study, we should observe, as regards our first research question, that there are several papers on international classification of accounting systems. Suggested classifications of accounting systems in some developed western countries in 1980 is founded on the dichotomous distinction between Anglo countries and continental European countries (Nobes 1983), and many studies examine how the influence of accounting rules or auditors' opinions about accounting practices may determine country grouping (Nobes 1983; Doupnik and Salter 1993; D'Arcy 2001).

International classifications can be split into extrinsic classification, founded on influences on accounting, and intrinsic classifications, based on accounting itself, as also noted by Gray (1988) and Roberts (1995): the influential factors most proximate to accounting itself are legal systems, taxation systems and financing systems (Nobes 2006). In a broader context, the literature offers a large number of possible reasons for international differences, such as external environment, culture, institutional structures and accounting practices (Doupnik and Salter 1995), managerial philosophy, capital markets, tax law and different user orientations of the countries

concerned (Gray 1980), and also general theories linking the factors, in particular founded on the strengths of equity markets and on the degree of cultural dominance (Nobes 1998).

Nobes (2011) shows that the extensively debated classification between Anglo and continental European countries, drawn up in 1980, is still discernible, by analyzing the IFRS practices of large listed companies, with particular reference to seven countries (besides Australia) that had implemented the main EU accounting harmonization measures (the Fourth and Seventh Directives on company law) by 1995.

It is also noted that IFRS offers considerable scope for companies to choose accounting policies, and therefore it allows national profiles of IFRS practice to emerge, as reported in the literature for European major countries (Kvaal and Nobes 2010). In fact, despite some increased compliance with IASC standards (Emenyonu and Gray 1996) and 30 years of harmonization led by the International Accounting Standard Committee/Board and by the European Union, many differences still exist in Western European accounting practices, international differences are clearly visible and countries form the same grouping as they did decades ago (Nobes 2011).

In summary, whilst the Anglo-Saxon model has historically focused on equity holders, discretion in the preparation of financial statements as long as the resulting statements provide a "true and fair view" of financial condition, and decoupled tax and financial reporting, the Continental model is characterized by a focus on debt holders, codified reporting requirements and a strong link between financial and tax reporting (Joos and Lang 1994).

So, this strand of literature, relevant for our research, provides evidence that accounting differences generally are very deep-seated and resistant to harmonization over long periods (Nobes 2011), and significant variations in accounting rules and practice continue to arise in European countries (Blake et al. 1998).

Looking at the primary factors that have historically led to differences in accounting practice across the EU countries, Joos and Lang (1994) identify the extent of legal influences on accounting and financial reporting, the differences among capital providers, and the influence of taxation on financial statements. Investigating impacts on the financial statement caused by differences in accounting measurement practice in France, Germany and the United Kingdom, the authors find evidence that significant differences in reported profitability and the multiplies applied to accounting data existed prior to the EU accounting directives, and that such differences were not significantly reduced following implementation of the directives. As a consequence, it appears that the flexibility allowed by the directives left substantial differences in accounting among European countries largely unaffected (Joos and Lang 1994).

The solution for bridging the conceptually conflicting visions of the two different accounting cultures relevant for our research—Anglo-Saxon and continental philosophy of accounting—consisted in reaching a compromise amongst the considerable number of options emerging from the directives (Van Hulle 1992, 1993; Walton 1997) in the at times controversial areas of format, recognition and valuation (Haller 2002).

In fact, though the directives led to substantial changes in the letter of accounting law in the member countries, their effect on the resulting accounting data is not as clear: while the directives required that financial statements reflect the true and fair view, their more specific requirements, particularly on measurements issues, left significant discretion to member states (Joos and Lang 1994). Influenced by the national accounting traditions of the particular states, these available options have been carried out in different ways throughout Europe, which ultimately was the reason for not achieving a satisfactory degree of comparability and equivalence of financial statements across Europe (Haller 2002).

Also as regards our second research question, the related literature provides evidence of the differences that we assume, thereby supporting our hypotheses on the Questionnaire's respondent categories. Beattie et al. (2006), conducting a questionnaire survey of United Kingdom users and preparers to assess their views on proposals for lease-accounting reforms and on the potential economic consequences of their adoption, provide evidence that the views of the two respondent categories differ significantly: their findings suggest that standard setters have to consider that the interests of users and preparers conflict, and that concerns about the general under-representation of users' views on accounting standards are well-founded. Similarly, the results of a questionnaire survey of the perception of, and participation in, the IASB process of a sample of U.K. investment management firms (Georgiou 2010), indicate that the level of lobbying activity undertaken by users is low, relative to that of other interest groups such as financial statement preparers.

Significant differences between respondent categories are also found by Ousama et al. (2011), which investigate preparers' and users' perceptions on the usefulness of intellectual capital information disclosed in the annual reports of listed companies, and by Jarrar et al. (2007), with reference to the perception of users and preparers concerning the likelihood of successfully implementing activity-based costing in a university setting.

In addition, Quagli and Paoloni (2012) analyze the homogeneity among European Countries, users and preparers in the European Commission Questionnaire on the public consultation of the IFRS for SMEs, providing evidence that preparers demonstrate a strong opposition to the IFRS for SMEs, while users are more favorable, and, concerning Country classification, German-speaking Countries and Latin Countries show much less appreciation for that standard with respect to Anglo-Nordic Countries. Finally, Quagli et al. (2015) examine the European Commission Questionnaire on the European Accounting Directives review with reference to the questions related to reductions in mandatory information and to differential reporting, providing evidence of significant differences in respondents' views.

# 4 Sample Selection and Level of Participation by Respondents

In order to analyze the answers to the European Questionnaire, we group them following the traditional Country classification founded on international accounting theory (Nobes 1983). On the contrary, the different classification by single Country used by the European Summary Report (European Commission 2009b) shows marked disproportion of responses: out of a total of 25 Countries to which respondents belong, the three most "active" Countries account for nearly 40% of the responses (Germany, the first, is over 15% of the responses) and from 15 States there are only 3 or fewer responses.

According to the Summary Report above mentioned (European Commission 2009b), the Commission Services received 105 original responses to the consultation representing a full spectrum of European stakeholders, from 22 EU Member States and 2 non-EU Countries, as well as EU wide representative organizations. Respondents were classified in that report as preparers (22 responses), users (13), accountants and auditors (37), public authorities (22) and "others" (11), presumably on the basis of category self-assessment provided in each Questionnaire. A number of duplicate responses were received: for statistical purposes these have been treated as one by the European Commission.

We downloaded the responses from the European Commission website (European Commission 2009a) and we also kept useful information from each respondent website in order to check—similar to previous related studies (Quagli and Paoloni 2012; Quagli et al. 2015)—whether the respondent category declared by respondents and used by the European Summary Report corresponds to the real role emerging from the analysis of the respondent activity. Consequently, we do not use the "others" category. Moreover, we treated duplicate responses as one only if respondents belong to the same category.

In this way, we obtained different numbers of respondent. Table 2 shows the list of respondents by Country and by category, extending the analysis presented in a previously cited study (Quagli et al. 2015).

In our classification there are 107 original responses: 28 from preparers, 17 from users, 37 from accountants and auditors, 25 from public authorities. The analysis by category demonstrates the weak participation by users (16%)—confirming the results of other previous studies (Beattie et al. 2006; Schiebel 2008; Quagli and Paoloni 2012)—even though the protection of essential user needs through retaining necessary accounting information for users is declared as one of the key objective of the directives review. On the other hand, the highest number of responses comes from accountants and auditors (35%). Concerning Country classification, we can observe the considerable participation by German stakeholders, European Institutions, and respondents from the United Kingdom. The list of respondents by Country group is provided at Table 3.

The highest number of responses (equal to 32) comes from Latin Countries, followed in descending order by Anglo-Nordic (29 responses), German-speaking

 Table 2
 List of respondents by Country and by category

Member State	Group	N. resp.	%	Preparers	Users	Accountants and auditors	Public authorities
Germany	German- speaking	17	15.89	8	2	5	2
European Union (Institutions)	European Union	15	14.02	4	4	7	0
United Kingdom	Anglo- Nordic	10	9.35	1	2	4	3
Belgium	Latin	7	6.54	3	1	2	1
Spain	Latin	6	5.61	0	2	1	3
Italy	Latin	6	5.61	0	1	4	1
Luxembourg	Latin	6	5.61	2	1	2	1
Netherlands	Anglo- Nordic	6	5.61	1	1	2	2
Denmark	Anglo- Nordic	4	3.74	1	0	2	1
France	Latin	4	3.74	2	0	1	1
Austria	German- speaking	3	2.80	1	1	0	1
Finland	Anglo- Nordic	3	2.80	0	0	2	1
Sweden	Anglo- Nordic	3	2.80	1	0	1	1
Czech Republic	German- speaking	2	1.87	1	0	0	1
Hungary	German- speaking	2	1.87	0	0	1	1
Ireland	Anglo- Nordic	2	1.87	1	0	1	0
Portugal	Latin	2	1.87	0	0	1	1
Slovenia	Eastern Europe	2	1.87	1	1	0	0
Azerbaijan (non-EU)	Eastern Europe	1	0.93	0	0	1	0
Greece	Latin	1	0.93	1	0	0	0
Lithuania	Eastern Europe	1	0.93	0	0	0	1
Norway (non-EU)	Anglo- Nordic	1	0.93	0	1	0	0
Poland	German- speaking	1	0.93	0	0	0	1
Romania	Eastern Europe	1	0.93	0	0	0	1
Slovak Republic	Eastern Europe	1	0.93	0	0	0	1
Total number		107		28	17	37	25
Total percenta	ge		100.00	26.17	15.89	34.58	23.36

Group	N. resp.	%	Preparers	Users	Accountants and auditors	Public authorities
Latin	32	29.91	8	5	11	8
Anglo-Nordic	29	27.10	5	4	12	8
German-speaking	26	24.30	10	3	6	7
European Union (Institutions)	15	14.02	4	4	7	0
Eastern Europe	5	4.67	1	1	1	2
Total	107	100.00	28	17	37	25

Table 3 List of respondents by Country group and by category

countries (26) and European Institutions (15). Eastern Europe Countries are represented only by five entities: as a consequence, for statistical reasons, we do not consider these responses in our subsequent analysis.

Table 4 specifies the level of interest by respondents for each question, measured by the percentage of "yes/no" responses. For each analyzed question, every respondent could answer "yes", "no", "don't know", or provide no answer.

Respondents interest is particularly high on the subject of simplifications, for instance concerning the proposal of eliminating the requirement to publish accounts and to prepare annual reports (Q11 and Q17), together with the proposal of modifying the directives format in order to highlight the importance of basic principles (Q1). For these issues the level of interest is equal about to 85%.

On the other hand, the lowest level of interest is recorded with reference to the other questions concerning the review of the directives format (Group C2), not considering the questions for only one respondent category (Q14, Q15 and Q28). In particular, the low interest in the amendments of the Seventh Directive (Q35), equal to only 55%, could be justified by the fact that in the European context the consolidated financial statements do not have "legal value" and are generally prepared by the direct use of IAS/IFRS principles. Overall, with reference to the total number (25) of the questions, we note a mean level of interest equal to about 67%, which rises to 74% if we consider only the 22 questions addressed to all the respondents.

# 5 Results and Analysis

# 5.1 Questions on Information Strengthening

Table 5 shows the results referring to Group A questions on agreement to strengthen the information required, comparing responses by Country group.

Group A, as already discussed, includes only two questions referring to the same issue, that is cash flow information: agreement on requiring cash-based information (Q12) and on requiring a minimum layout of the cash-flow statement (Q13).

 Table 4
 Level of interest by respondents

Tonio	Group (see	Question No.	% Yes	Yes	Don't know +	Tot man
Topic 11	Table 1)		+ no	+ no	not resp.	Tot. resp
Agreement on exempting small companies from the requirement to publish accounts	B2	17	86.9	93	14	107
Concentration of basic principles in one dedicated section	C2	1	85.0	91	16	107
Agreement on eliminating the requirement for annual reports for medium companies	B2	11	85.0	91	16	107
Agreement on current criteria for company categories	C3	7	81.3	87	20	107
Agreement on requiring a minimum layout of the cash-flow statement	A	13	80.4	86	21	107
Agreement on current thresholds for company categories	C3	8	79.4	85	22	107
Agreement on requiring cash- based information	A	12	78.5	84	23	107
Agreement on option for small companies to prepare only abridged accounts	B1	18	78.5	84	23	107
Agreement on removing the separate line items for extraordinary effects	B2	27	78.5	84	23	107
Approval of a reduction of the number of company categories	C1	9	77.6	83	24	107
Agreement on prescriptive formats for the balance sheet and the profit and loss account	B1	22	77.6	83	24	107
Creation of a bottom-up approach	B1	3	76.6	82	25	107
Appropriateness of current rules for small, medium and large companies	C3	4	73.8	79	28	107
Agreement on providing for only a minimum structure for balance sheet and p&l account	B1	24	72.9	78	29	107
Agreement on integrating the 7th Directive into the 4th Directive	C2	34	71.0	76	31	107
Agreement on other approaches to reduce the number of company categories	N	10	68.2	73	34	107
Requirement in own jurisdiction to provide a cash-flow statement	N	16	68.2	73	34	107
Agreement on reducing the number of available layouts	C1	23	68.2	73	34	107

(continued)

Table 4 (continued)

	Group (see	Ouestion	% Yes	Yes	Don't know +	
Topic	Table 1)	No.	+ no	+ no	not resp.	Tot. resp.
Agreement with the need to streamline the terminology of the Directives	C2	36	68.2	73	34	107
Agreement on potential for mod- ernization and simplification in the area valuation rules	C2	32	66.4	71	36	107
Agreement on developing one XBRL taxonomy at the EU level	C1	21	58.9	63	44	107
Agreement with the need for amendments or modernization of the 7th Directive	C2	35	55.1	59	48	107
Only for users—Usefulness of the extraordinary item	N	28	26.2	28	79	107
Only for preparers—Provision of a cash-flow statement in the past years	N	14	14.0	15	92	107
Only for bank or credit provider— Usefulness of a cash-flow statement	N	15	4.7	5	102	107
Total number of questions		25	67.3	1799	876	2675
Total number of questions—less questions for only a respondent category		22	74.4	1751	603	2354

Table 5 Group A questions (information strengthening)—results by Country group

Q12-Q13	German-speaking	Latin	Anglo-Nordic	European Union	Total
Yes	38	48	22	14	122
No	12	7	19	2	40
Total	50	55	41	16	162
% yes	76	87	54	88	75

There is a strong prevalence of agreement (75%) in achieving such information strengthening, mainly as regards Latin respondents (87% favorable) that confirm, as assumed (see  $H_{1c}$ ), their traditional orientation towards a rule-based approach, and European Union respondents (88% favorable). On the other hand, we observe a significant difference (at 0.01, by applying the chi-square statistic) between Anglo-Nordic Country (only 54% favorable) and the three other Country groups (83% favorable on average): as assumed too (see  $H_{1a}$ ), Anglo-Nordic Countries show their higher diffidence towards the increase of formal requirements. With regards to category groups, Table 6 provides our findings.

The category of respondents most favorable to introducing new cash flow information requirements is represented by public authorities (82% yes), confirming their

Q12-Q13	Preparers	Users	Accountants and auditors	Public authorities	Total
Yes	28	14	48	32	122
No	14	5	14	7	40
Total	42	19	62	39	162
% yes	67	74	77	82	75

Table 6 Group A questions (information strengthening)—results by category

**Table 7** Group B1 questions (broader information freedom)—results by Country group

Q3-Q18-Q22-Q24	German-speaking	Latin	Anglo-Nordic	European Union	Total
Yes	40	40	52	24	156
No	48	65	26	13	152
Total	88	105	78	37	308
% yes	45	38	67	65	51

hypothesized aim at obtaining and managing as much data as possible in order to carry out effective policies (see  $H_{2c}$ ). Lower support comes from the preparers instead (67% favorable), considering as expected (see  $H_{2b}$ ), that they tend to be contrary to additional administrative burdens.

#### 5.2 Questions on Broader Information Freedom

More questions have been classified in Group B on information weakening, according to the fact that the main aim of the review is the simplification and the reduction of burdens, with particular reference to small enterprises. Having regard to issues of broader information freedom represented by Group B1 questions, Table 7 shows the results by Country group.

The proposals concern the creation of a bottom-up approach (Q3), the introduction of the option for small companies to prepare only abridged accounts (Q18), the maintenance of prescriptive formats for the balance sheet and the profit and loss account (Q22: as the question is formulated in the other way, we compute "no" responses as "yes" and vice versa) and the provision of only a minimum structure for the balance sheet and the profit and loss account (Q24).

We obtained very similar numbers of favorable (equal to 156) and contrary (equal to 152) opinions, but with strong differences across Country groups. As presumed (see  $H_{1a}$ ), Anglo-Nordic respondents support these proposals, as two thirds of respondents answer "yes" to the questions, due to their cultural tradition of information freedom for enterprises. We highlight the difference, significant at 0.01 level by applying the chi-square statistic, between the Anglo-Nordic and Latin groups. The latter shows favorable answers equal to only 38%, confirming (see  $H_{1c}$ ) in this different cultural context the supremacy of a rule-based approach with rigid schemes for financial statements and well defined evaluation criteria.

Q3-Q18-Q22- Q24	Preparers	Users	Accountants and auditors	Public authorities	Total
Yes	45	10	68	33	156
No	33	22	58	39	152
Total	78	32	126	72	308

Table 8 Group B1 questions (broader information freedom)—results by category

Table 8 also confirms our hypotheses (see  $H_{2a}$ ,  $H_{2b}$  and  $H_{2c}$ ) on the position of category groups as regards the issue of broader information freedom for enterprises.

Users are strongly opposed (69% of "no" answers) to these proposals (see  $H_{2a}$ ), whilst the majority of preparers (58%) are in favor (see  $H_{2b}$ ), with a difference significant at 0.01 level. According to Group A results, we also note that the position of public authorities towards weaker information is negative, as "no" answers are equal to 54% (see  $H_{2c}$ ).

### 5.3 Questions on Elimination of Information Requirements

The second group of questions included in the area of information weakening (Group B2) concerns proposals for a significant reduction of information requirements compared to the current rules. These are the most unsettling issues emerging from the European Commission Questionnaire and regard the elimination of the requirement for medium-sized companies to prepare annual reports (Q11) and the exemption from the requirement to publish accounts by small companies (Q17), in addition to the proposal to remove the separate line items for extraordinary effects (Q27).

In line with the proposals and the statements issued by several German representatives in the European Parliament, as presented in Table 9, the majority of German-speaking respondents favor these proposals of strong information reduction, although with a slight prevalence of yes (37 vs. 35 out of a total of 72 responses), whilst respondents of all the other Country groups are opposed, with "no" answers equal to 69% on average: as assumed (see  $H_{1b}$ ), the difference between the German-speaking area and the other Country group results is highly significant (at 0.01 level by applying the chi-square statistic).

With regard to respondent category (Table 10), only preparers favor eliminating such disclosure and publication requirements (see  $H_{2a}$ ): the percentage of "yes"

Table 9	Group B2 questions	(elimination of infor	nation requirements	s)—results by Country	group

Q11-Q17-Q27	German-speaking	Latin	Anglo-Nordic	European Union	Total
Yes	37	25	21	10	93
No	35	68	39	18	160
Total	72	93	60	28	253
% yes	51	27	35	36	37

Q11-Q17-Q27	17–Q27 Preparers Users A		Accountants and auditors	Public authorities	Total
Yes	33	5	33	22	93
No	31	25	66	38	160
Total	64	30	99	60	253
% yes	52	17	33	37	37

Table 10 Group B2 questions (elimination of information requirements)—results by category

answers is equal to 52% and differ significantly (at 0.01 level) with respect to the average ratio (32%) of favorable opinions among the other three categories, which in fact are markedly opposed, supporting our hypotheses (see  $H_{2b}$ ,  $H_{2c}$  and  $H_{2d}$ ).

In particular, the opposition of accountants and auditors could be justified if we think that such a proposal of simplification, if realized, could reduce *ceteris paribus* their services for the companies involved (see  $H_{2d}$ ).

# 5.4 Questions on Reduction of Alternative Options or Categories

In the four following tables (Tables 11–14) we synthesize the results by Country group and by category with reference to the questions included in the area of innovation (Group C) that do not directly entail an increase or decrease of corporate disclosure, unlike the previous question groups.

Group C1 questions concern the changes proposed in order to reduce the number of alternative options or categories provided for in the current rules, with particular reference to the decrease in the number of company categories (Q9), the development of one XBRL taxonomy at the European Union level (Q21), and the reduction of the number of available balance sheet and profit and loss account layouts (Q23).

As regards Country groups (Table 11), the data provides evidence of clear support by Latin respondents (favorable at 70%), with a significant difference (at 0.01 level) over the average ratio (equal to only 45%) of favorable opinions among the other Country areas. Such findings confirm our hypothesis (see  $H_{1c}$ ), as the Latin area is oriented towards more prescriptive measures with a stronger role of civil code and formal rules.

 Table 11
 Group C1 questions (reduction of alternative options or categories)—results by Country group

Q9-Q21-Q23	German-speaking	Latin	Anglo-Nordic	European Union	Total
Yes	20	53	28	11	112
No	36	23	25	10	94
Total	56	76	53	21	206
% yes	36	70	53	52	54

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Q9-Q21-Q23	Preparers	Users	Accountants and auditors	Public authorities	Total
Yes	32	11	43	26	112
No	22	12	41	19	94
Total	54	23	84	45	206
% yes	59	48	51	58	54

 Table 12
 Group C1 questions (reduction of alternative options or categories)—results by category

Table 12 provides the results concerning the four categories of respondents, revealing that only users show a prevalence of negative answers (52%).

These findings could be interpreted as a presumable user preference for the keeping of already known schema, though the difference among respondent categories is not significant.

### 5.5 Questions on Amendment of Directive Format

Group C2 questions consider the proposals of amendment of the directive formats, concerning the concentration of basic principles in one dedicated section (Q1), the modernization and the simplification in the area valuation rules (Q32), the integration of the Seventh Directive into the Fourth directive (Q34), the need for amendments or modernization of the Seventh Directive (Q35) and the need to streamline the terminology of the Directives (Q36).

Table 13 reports on a wide consensus (83%) across Country groups.

In particular, nearly all the Anglo-Nordic respondents (79 yes out of a total of 85 responses) are favorable and this percentage (equal to 93%) is significantly different (at 0.01 level, always by applying the chi square statistic) from the average ratio (79%) corresponding to all the other Country groups. These proposals could actually lead to a stronger role of the principles and to a greater transparency that distinguish the Anglo-Nordic accounting tradition (see  $H_{1a}$ ).

Difference based on category respondents (Table 14) is significant too (at 0.05 level), if we consider the lower support by users (69%) compared to the other categories, for which we remark an average ratio of favorable opinions equal to 83%.

It could be argued that users are less inclined to modify well known formats, worrying that they would have to incur additional burdens in order to assimilate new schema and rules.

Table 13	Group C2 questions	(amendment of directive format)-	results by Country group

Q1-Q32-Q34-Q35- Q36	German- speaking	Latin	Anglo- Nordic	European Union	Total
Yes	72	105	79	34	290
No	32	16	6	7	61
Total	104	121	85	41	351
% yes	69	87	93	83	83

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Q1-Q32-Q34-Q35- Q36	Preparers	Users	Accountants and auditors	Public authorities	Total
Yes	74	24	119	73	290
No	13	11	26	11	61
Total	87	35	145	84	351
% yes	85	69	82	87	83

Table 14 Group C2 questions (amendment of directive format)—results by category

# 5.6 Questions on Degree of Satisfaction for Current Rule

Finally, the last two tables (Tables 15 and 16) refer to the Group C3 questions, concerning the degree of satisfaction for current rules, more precisely with regard to the appropriateness of current rules for small, medium and large companies (Q4), the agreement on current criteria for company categories (Q7), and the agreement on current thresholds for company categories (Q8).

We report a clear prevalence of favorable opinions (66%), without registering any significant difference across both Country groups (Table 15) and category (Table 16) respondents.

 Table 15
 Group C3 questions (degree of satisfaction for current rules)—results by Country group

Q4-Q7-Q8	German-speaking	Latin	Anglo-Nordic	European Union	Total
Yes	46	55	38	17	156
No	29	28	16	8	81
Total	75	83	54	25	237
% yes	61	66	70	68	66

 Table 16
 Group C3 questions (degree of satisfaction for current rules)—results by category

Q4-Q7-Q8	Preparers	Users	Accountants and auditors	Public authorities	Total
Yes	35	18	62	41	156
No	26	9	29	17	81
Total	61	27	91	58	237
% yes	57	67	68	71	66

# 6 The Review of the Accounting Directives: The Following Phases

#### 6.1 The European Commission Proposal

As already noted in Sect. 2, the responses to the Questionnaire are commented on by the European Commission in its Summary Report (European Commission 2009b). However, the Report does not specify results based on Country Group reclassification. The classification detailed by single Country is included only in the annexes, even though it is not commented on in the Summary Report. The annexes also report the data based on the distinction between lobbyist and EU wide organizations, a classification not relevant for our purposes. The classification using the categories of respondents (preparers, users, public authorities, accountants and auditors, others) is included only in the annexes too, while in the Summary Report only partial comments for some questions can be found.

In any case, the European Commission finds considerable support by the majority of respondents for the concentration of basic principles in one dedicated section (Q1), the creation of a bottom-up approach (Q3), the requirement of cash-based information (Q12) and minimum layout of the cash-flow statement (Q13), the development of one XBRL taxonomy at the EU level (Q21), the reduction of the number of available balance sheet and profit and loss account layouts (Q23), the provision of only a minimum structure for the balance sheet and the profit and loss account (Q24), the modernization and simplification in the area valuation rules (Q32), the integration of the Seventh Directive into the Fourth directive (Q34), the need for amendments or modernization of the Seventh Directive (Q35) and the need to streamline the terminology of the Directives (Q36).

Concerning the other issues, the European Commission registers mainly opinions opposed to the reduction of the number of company categories (Q9), the removal of prescriptive formats for the balance sheet and the profit and loss account (Q22), the elimination of the requirement for annual reports for medium companies (Q11) and the exemption for small companies from the requirement to publish accounts (Q17). Finally, controversial results emerge as regards the introduction of the option for small companies to prepare only abridged accounts (Q18) and the elimination of the separate line items for extraordinary effects (Q27).

In the light of the above-described results, it is interesting to compare the answers received by the European Commission to the consequent proposal for a new Accounting Directive presented in 2011 by the same Commission (European Commission 2011a), in order to test whether and to what extent the needs emerging from the public consultations have been taken into account.

This proposal is accompanied by separate documents concerning the impact assessment of a number of review policy options (European Commission 2011b, c). Having compared five broad policy options—from the baseline scenario (no change) to the repeal of the Directives—the preferred one is a revision through a new Directive replacing the existing Fourth and Seventh Directives (European

Commission 2011c). The Commission justifies this choice as the most reasonable option to achieve the objectives of the Review, having regard to the necessity and proportionality of EU legislation, the timeline and its acceptability to stakeholders (European Commission 2011b).

Then the Commission examines the impact assessment of a subset of options for the revision of the Directives within the context of the preferred broad approach (European Commission 2011b, p. 3). In particular, reducing information given in notes by small companies and maximizing harmonization across the European Union are considered the best options to ensure that the Review objectives are met with potential high acceptability (European Commission 2011c).

However, it seems that the number of amendments included in the proposal is limited compared to the demand for several changes shared by a large majority of respondents, mainly as regards simplification and reduction of administrative burdens. Indeed, considering all the closed questions raised by the European Commission, the accepted requests of change only concern the concentration of basic principles in one dedicated section (Q1), the reduction of the number of available layouts (Q23), the elimination of the separate line items for extraordinary effects (Q27), although introducing a new requirement to disclose them separately within the profit and loss accounts with an explanatory note, and the amendments regarding the creation of one Accounting Directive (Q34 and Q35).

We observe that the creation of a bottom-up approach (Q3) is partially accepted, only with reference to notes to the financial statements. As a consequence, small undertakings will have a more limited disclosure regime, when compared to current Directives, even though new requirements to disclose post-balance sheet events and related party transactions in the notes are introduced for all companies.

There is only a limited acceptance for the proposal of simplification of valuation rules (Q32). In particular, a general principle of materiality is introduced, so recognition, measurement, presentation and disclosure in financial statements should be subject to materiality constraints. However, in our opinion, this new principle could lead to additional problems in terms of comparability, since quantitative thresholds are not fixed and determining materiality will remain a company's primary responsibility. A requirement to show the economic reality of a transaction in the financial statements, and not just its legal form, is also introduced as a general principle as well. LIFO valuation method is not permitted for stocks and fungibles, and national options allowing replacement cost accounting and inflation methods have been removed.

The shared proposal to streamline the terminology of the Directives (Q36) has turned into a replacement of only three terms ("company" with "undertaking", "accounts" with "financial statements" and "annual report" with "management report"). As concerns the closed questions with proposed changes (Groups A, B1, B2, C1 and C2), Table 17 compares respondents' orientation with the European Commission proposal.

Having regard to the European Commission Questionnaire structure and to the classification of the issues proposed in our analysis, we can synthesize some points as follows:

 Table 17 Closed questions with proposed changes—respondents' orientation and European Commission proposal

Topic	Question No.	Group (see Table 1)	Respondents' orientation	European Commission proposal
Agreement on requiring cash-based information	12	A	All favorable to the proposed changes	Change not accepted
Agreement on requiring a minimum layout of the cash-flow statement	13			Change not accepted
Creation of a bottom-up approach	3	B1	Mixed: Latin and users strongly contrary while Anglo-Nordic and preparers	Change partially accepted
Agreement on option for small companies to pre- pare only abridged accounts	18		more favorable to the proposed changes	Change not accepted
Agreement on keeping prescriptive formats for the balance sheet and the p&l account	22			Change not accepted
Agreement on providing for only a minimum structure for balance sheet and p&l account	24			Change not accepted
Agreement on eliminating the requirement for annual reports for medium companies	11	B2	Mixed: Latin and users strongly contrary while German-speaking and pre- parers more favorable to the	Change not accepted
Agreement on exempting small companies from the requirement to publish accounts	17		proposed changes	Change not accepted
Agreement on removing the separate line items for extraordinary effects	27			Change accepted
Approval of a reduction of the number of company categories	9	C1	Mixed: German-speaking and users contrary while Latin and preparers more	Change not accepted
Agreement on developing one XBRL taxonomy at the EU level	21		favorable to the proposed changes	Change not accepted
Agreement on reducing the number of available layouts	23			Change accepted
Concentration of basic principles in one dedicated section	1	C2	All favorable to the proposed changes	Change accepted

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	Ouestion	Group (see		European Commission
Topic	No.	Table 1)	Respondents' orientation	proposal
Agreement on potential for modernization and simplification in the area valuation rules	32			Change partially accepted
Agreement on integrating the 7th Directive into the 4th Directive	34			Change accepted
Agreement with the need for amendments or mod- ernization of the 7th Directive	35			Change accepted
Agreement with the need to streamline the terminology of the Directives	36			Change partially accepted

Table 17 (continued)

- the proposals included in Group A ('information strengthening') questions, despite wide support by the majority of respondents, have not been accepted;
- in front of significantly different results across respondent classes, the proposals considered in Group B1 ('broader information freedom') questions have not been adopted either, if we exclude only a partial introduction of the bottom-up approach (Q3), so supporting the opinion of Latin respondents and users, strongly opposed to those changes;
- also the Group B2 ('elimination of information requirements') proposals, distinguished by the prevalence of favorable answers by preparers, on the one hand, and by the strong opposition of users on the other have not been allowed, except the partial change concerning the disclosure of the extraordinary effects (Q27);
- with reference to Group C1 ('reduction of alternative options or categories'), only
  the proposal of a reduction of the number of available balance sheet and profit and
  loss account layouts has been accepted (Q23), in line with the clear prevalence of
  negative answers coming only from German respondents and users;
- as regards Group C2 ('amendment of directive format'), the majority of the proposals of change, in particular those included in the macro-topic 'Creating One Accounting Directive' (Q34, Q35 and Q36), have been adopted, according to the wide consensus among all the respondent classes.

In summary, it seems that several needs emerging from the public consultation have not been adequately considered by the Commission. In spite of large support by respondents, the new Accounting Directive has adopted proposals only with reference to some issues (included in Group C2 questions), but not as regards other shared suggestions (included in Group A questions). Moreover, in front of strong and significant differences among respondent classes (in particular, see Group B1 and B2 questions), we remark that the European Commission decisions in fact have

promoted users' positions, so supporting the 'user primacy' traditional principle (Gaa 1986).

Importantly, the European Summary Report specifies that the results of the public consultation do not commit the Commission to future action (European Commission 2009b), thereby raising doubts about the significance and the effective role of such initiatives.

# 6.2 The Amendments to the European Commission Text and the Adoption of the New Accounting Directive

To outline a complete picture of the history of the Accounting Directives review, it is worth considering also subsequent amendments to the Commission proposal moved by the Council and the European Parliament. During the years 2012 and 2013 the new Accounting Directive was discussed at numerous meetings by the Council and its preparatory bodies and at various informal trilogues with the European Parliament: on April 2013 a conclusive agreement was reached and the final compromise text was approved (Council of the European Union 2013), though the amendments directly related to the items considered by the European Commission Questionnaire are limited.

Finally, in June 2013 the new Accounting Directive 2013/34/EU was adopted by the European Parliament and the Council of the European Union (European Parliament and Council 2013). In particular, it was decided:

- to mitigate some effects of the materiality principle. In particular, it is specified that even if a single item might be considered to be immaterial, immaterial items of a similar nature might be considered altogether material. In addition, Member States should be allowed to limit the mandatory application of the principle of materiality to presentation and disclosure, so excluding recognition, measurement and consolidation in the financial statements. In any case, the materiality principle shall not affect any national obligation to keep complete records showing business transactions and financial position (European Parliament and Council 2013, preamble no. 17);
- to reintroduce the possibility for Member States to choose between alternative layouts for the presentation of the balance sheet (European Parliament and Council 2013, art. 10 and art. 11);
- to reintroduce the LIFO valuation method, contrary with IAS/IFRS provisions (European Parliament and Council 2013, art. 12, para. 9);
- to eliminate the requirement to disclose extraordinary effects separately within the profit and loss accounts, while it is confirmed the introduction in the notes to the financial statements of the new explanatory note on the amount and nature of individual items of income or expenditure which are of exceptional size or incidence (European Parliament and Council 2013, art. 16, para. 1, lett. F);

- to exempt small companies from additional mandatory disclosures in the notes, mainly with reference to post-balance sheet events and related party transactions, although Member States may require that small undertakings shall disclose such information as required (European Parliament and Council 2013, art. 16 para. 2 and art. 17);
- to include in the same text a number of exemptions and further simplifications for micro entities (temporarily considered by the European Commission in a separate review), containing the exemption from a general publication requirement of annual accounts (provided that balance sheet information is duly filed, in accordance with national law, with at least one designated competent authority and that the information is transmitted to the business register, so that a copy should be obtainable upon application).

As concerns the closed questions with proposed changes, Table 18—which extends the analysis presented in a previous study (Quagli et al. 2015)—summarizes the main changes to the European Accounting Directives proposed in the 2011 European Commission draft, the main changes approved by the European Parliament and the Council in the 2013 final text, and the changes derived from the 2012 European Directive on micro-entities.

#### 7 Conclusion

The significant differences among Countries theorized by the international accounting literature (Nobes 1983, 2006) are confirmed by our findings: national accounting culture and economic features are determinants in affecting groups' perception of financial reporting proposed changes (Fontes et al. 2016) and so differentiating answers on the basis, respectively, of German-speaking, Latin and Anglo-Nordic respondents. These differences particularly emerge with reference to the strongest proposals, concerning the elimination of significant disclosure and publication requirements, supported only by German-speaking respondents. On the other hand, Anglo-Nordic Countries agree on increasing simplification options and information freedom, whilst Latin Countries are more oriented towards a rule-based approach.

As an element of progress, the findings also confirm our hypotheses founded on the impact of respondent categories: results show a significant diversity, in the predicted sense, among preparers, users, accountants and auditors, public authorities. In particular, our results highlight more appreciation by preparers for a significant reduction of mandatory disclosure with respect to users and public authorities.

Certainly, there is a confirmation of weak participation of users as noted in other previous studies concerning the IFRS for SMEs setting process (Paoloni 2006; Schiebel 2008; Quagli and Paoloni 2012). Nevertheless, according to the classic 'user primacy' principle, user perspective seems to be preferred in the process of accounting directives review.

**Table 18** Main changes in the European Accounting Directive (EAD) concerning closed questions with proposed changes

— Proposed end	T	Main shances in the	Main abancas in the	
Торіс	Q	Main changes in the EAD proposed in the European Commission draft of October 25, 2011 (COM[2011] 684)	Main changes in the EAD approved by the European Parliament and the Council (Directive 2013/34/EU of June 26, 2013)	Changes in the EAD derived from the Directive 2012/6/EU of May 14, 2012 on micro-entities
Cash-flow information	12 13	No change proposed	No change approved	-
Bottom-up approach	3	Partial creation of a bottom-up approach only with reference to the notes to the financial statements, introducing a more limited disclosure regime for firms other than medium-size and large ones; however, introduction of new requirements to disclose post-balance sheet events and related party transactions for all undertakings	Partial creation of a bottom-up approach only with reference to the notes to the financial statements, introducing a more limited disclosure regime for firms other than medium-size and large ones; however, introduction of new requirements to disclose post-balance sheet events and related party transactions for all undertakings except for small ones (if not introduced by Member States)	Changes not derived from the Directive 2012/6/EU
Abridged accounts	18	No change proposed	Possibility for Member States only to require micro-entities to draw up only abridged financial statements	Changes derived from the Directive 2012/6/EU
Financial state- ments formats	22	No change proposed	No change approved	-
Financial state- ments structure	24	No change proposed	No change approved	_
Elements of annual accounts	11	_	Possibility for Member States only to exempt micro-entities from the obligation to prepare the notes to the financial statements and the management report, provided that limited information is disclosed at the foot of the balance sheet; possibility for Member	Changes derived from the Directive 2012/6/EU
				(continued

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Table 18 (continued)

Торіс	Q	Main changes in the EAD proposed in the European Commission draft of October 25, 2011 (COM[2011] 684)	Main changes in the EAD approved by the European Parliament and the Council (Directive 2013/34/EU of June 26, 2013)	Changes in the EAD derived from the Directive 2012/6/EU of May 14, 2012 on micro-entities
			States to permit micro- entities to draw up only an abridged bal- ance sheet and only an abridged profit and loss account	
Publication requirements	17	-	Possibility for Member States only to exempt micro-entities from the obligation to publish annual financial statements, provided that the balance sheet information contained therein is duly filed, in accordance with national law, with at least one competent authority designated by the Member State concerned	Changes derived from the Directive 2012/6/EU
Extraordinary effects	27	Elimination of the separate line items for extraordinary effects, although introducing a new requirement to disclose them separately within the profit and loss accounts with an explanatory note	Elimination of the separate line items for extraordinary effects, although introducing a new explanatory note	Changes not derived from the Directive 2012/6/EU
Company categories reduction	9	No change proposed	No change approved; on the contrary, creation of the micro-entity category	Changes derived from the Directive 2012/6/EU
XBRL taxonomy	21	No change proposed	No change approved	_
Financial statements layouts	23	Reduction of the number of available balance sheet layouts (one instead of two layouts) and profit and loss account layouts (two instead of four layouts)	Reduction of the number of available layouts of profit and loss account (two instead of four layouts); reintroduction of two alternative balance sheet layouts	Changes not derived from the Directive 2012/6/EU

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Table 18 (continued)

Topic	Q	Main changes in the EAD proposed in the European Commission draft of October 25, 2011 (COM[2011] 684)	Main changes in the EAD approved by the European Parliament and the Council (Directive 2013/34/EU of June 26, 2013)	Changes in the EAD derived from the Directive 2012/6/EU of May 14, 2012 on micro-entities
Basic principles	1	Concentration of basic principles in one dedicated section	Concentration of basic principles in one dedicated section	Changes not derived from the Directive 2012/6/EU
Valuation rules	32	Introduction of a general principle of materiality, as regards recognition, measurement, presentation and disclosure in financial statements; introduction of a new requirement to show the economic reality of a transaction in the financial statements, and not just its legal form; elimination of LIFO valuation method; removal of national options allowing replacement cost accounting and inflation methods	Mitigation of some effects of the materiality principle, e.g. as concerns the possibility for Member States to limit the mandatory application of the new principle to presentation and disclosure in financial statements; possibility for Member States to exempt undertakings from the new requirement to show the economic reality of a transaction in the financial statements; reintroduction of LIFO valuation method; removal of national options allowing replacement cost accounting and inflation methods	Changes not derived from the Directive 2012/6/EU
Structure	34 35	Creation of a single Accounting Directive replacing the existing 4th and 7th Directives	Creation of a single Accounting Directive replacing the existing 4th and 7th Directives	Changes not derived from the Directive 2012/6/EU
Terminology	36	Replacement of very few terms in order to streamline the termi- nology of the previous Directives	Replacement of very few terms in order to streamline the termi- nology of the previous Directives	Changes not derived from the Directive 2012/6/EU

With regard to methodological issues, this research has some limitations. First, it should be noted that in an open questionnaire—as with reference to any survey that allows respondents to decide whether to participate—there is a risk of self-selection bias of the respondents. Second, the number of respondents is not particularly high

(equal to 107), although the whole number of analyzed answers (equal to 2675) is significant. Finally, the same weight has been attributed to associations representing a large number of respondents and single entities, though this is similar to previous related studies (Quagli and Paoloni 2012; Quagli et al. 2015).

To sum up, in our opinion, the proposal for a new accounting directive, presented in 2011 by the European Commission, as well as the final text definitively approved in 2013 by the European Parliament and the Council of the European Union, seems not to consider adequately important needs emerging from the Questionnaire, so that such public consultations could appear, in some respects, as a ritual process. In actual fact, the project to simplify accounting rules and reduce the administrative burdens, mainly for small enterprises, looks partially unrealized, also considering that some changes in the European Accounting Directive derive from the Directive on the annual accounts of the previously created micro-entity category (European Parliament and Council 2012).

In addition, also looking at the consequent processes for internalizing the European Accounting Directive in national regulations and the different way each Member State accepted and transposed it by July 2015 (Di Pietra 2017; Collis et al. 2017; Le Manh 2017; Fülbier et al. 2017), it should be noted that international comparability of financial statements remains a significant issue, as this Directive includes several important options (Alexander 2015), emerging from our analysis, that have continued to allow Member States to adapt it (Collis et al. 2017) in accordance with persistent national accounting traditions.

## References

- Alexander, D. (2015). Directive 2013/34/EU, Article 6 an analysis and some implications. A research note. *Financial Reporting*, 1, 5–22.
- Beattie, V., Goodacre, A., & Thomson, S. J. (2006). International lease-accounting reform and economic consequences: The views of U.K. users and preparers. *The International Journal of Accounting*, 41(1), 75–103.
- Blake, J., Amat, O., Gowthorpe, C., & Pilkington, C. (1998). International accounting harmonization a comparison of Spain, Sweden and Austria. *European Business Review*, 98(3), 144–150.
- Collis, J., Jarvis, R., & Skerratt, L. (2017). The role and current status of IFRS in the completion of national accounting rules evidence from the UK. *Accounting in Europe*, 14(1–2), 235–247.
- Council of the European Union. (2013, April 12). Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings (Accounting Directive) (First reading) approval of the final compromise text [online]. Accessed December 30, 2016, from <a href="http://data.consilium.europa.eu/doc/document/ST-8328-2013-INIT/en/pdf">http://data.consilium.europa.eu/doc/document/ST-8328-2013-INIT/en/pdf</a>
- D'Arcy, A. (2001). Accounting classification and the international harmonisation debate an empirical investigation. *Accounting, Organizations and Society, 26*(4), 327–349.
- Di Pietra, R. (2017). The role and current status of IFRS in the completion of national accounting rules evidence from Italy. *Accounting in Europe*, 14(1–2), 121–130.
- Di Pietra, R., Evans, L., Chevy, J., Cisi, M., Eierle, B., Jarvis, R., & On Behalf Of The European Accounting Association's Financial Reporting Standards Committee. (2008). Comment on the

- IASB's exposure draft 'IFRS for Small and Medium-Sized Entities'. *Accounting in Europe, 5* (1), 27–47.
- Doupnik, T. S., & Salter, S. B. (1993). An empirical test of a judgemental international classification of financial reporting practices. *Journal of International Business Studies*, 24(1), 41–60.
- Doupnik, T. S., & Salter, S. B. (1995). External environment, culture, and accounting practice: A preliminary test of a general model of international accounting development. *The International Journal of Accounting*, 30(3), 189–207.
- Emenyonu, E. N., & Gray, S. J. (1996). International accounting harmonization and the major developed stock market countries: An empirical study. *The International Journal of Accounting*, 31(3), 269–279.
- European Commission. (2009a). Responses received to the Working Document of the Commission Services (DG Internal Market). Consultation paper on review of the Accounting Directives [online]. Accessed December 30, 2016, from https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp
- European Commission. (2009b). Summary report of the responses received to the Working Document of the Commission Services (DG Internal Market). Consultation paper on review of the Accounting Directives [online]. Accessed December 30, 2016, from http://ec.europa.eu/internal\_market/accounting/docs/200910\_accounting\_review\_consultation\_report\_en.pdf
- European Commission. (2011a). Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings. [COM/2011/0684 final 2011/0308 (COD)] [online]. Accessed December 30, 2016, from http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/? uri=CELEX:52011PC0684&from=en
- European Commission. (2011b). Executive summary of the impact assessment (Part I), accompanying the documents: Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings. Commission Staff Working Paper [online]. Accessed December 30, 2016, from http://ec.europa.eu/internal\_market/accounting/docs/sme\_accounting/review\_directives/SEC\_2011\_1290\_1\_en.pdf
- European Commission. (2011c). Impact assessment (Part I), accompanying the documents: Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings. Commission Staff Working Paper [online]. Accessed December 30, 2016, from http://ec.europa.eu/internal\_market/accounting/docs/sme\_accounting/review\_directives/SEC\_2011\_1289\_1\_en.pdf
- European Parliament. (2010, March 8). Debates: CRE 08/03/2010 19. Annual accounts of certain types of companies as regards micro-entities, Strasbourg [online]. Accessed December 30, 2016, from http://www.europarl.europa.eu/sides/getDoc.do?type=CRE&reference=20100308&secondRef=ITEM-19&language=EN&ring=A7-2010-0011
- European Parliament and Council. (2012, March 21). Directive 2012/6/EU of the European Parliament and of the Council of 14 March 2012 amending Council Directive 78/660/EEC on the annual accounts of certain types of companies as regards micro-entities. Official Journal of The European Union, L 81 [online]. Accessed December 30, 2016, form http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0006&from=EN
- European Parliament and Council. (2013, June 29). Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the Annual Financial Statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. Official Journal of The European Union, L 182 [online]. Accessed December 30, 2016, from http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/? uri=CELEX:32013L0034&from=EN
- Fontes, A., Rodrigues, L. L., & Craig, R. (2016). A theoretical model of stakeholder perceptions of a new financial reporting system. *Accounting Forum*, 40(4), 300–315.

- Fülbier, R. U., Pelger, C., Kuntner, E., & Bravidor, M. (2017). The role and current status of IFRS in the completion of national accounting rules evidence from Austria and Germany. *Accounting in Europe*, 14(1–2), 13–28.
- Gaa, J. C. (1986). User primacy in corporate financial reporting: A social contract approach. The Accounting Review, 61(3), 435–454.
- Gallup Organization. (2007). Observatory of European SMEs Fieldwork: November 2006–January 2007. Flash Eurobarometer N° 196 [online]. Accessed December 30, 2016, from http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl196\_en.pdf
- Georgiou, G. (2010). The IASB standard-setting process: Participation and perceptions of financial statement users. *The British Accounting Review*, 42(2), 103–118.
- Gray, S. J. (1980). The impact of international accounting differences from a security-analysis perspective: Some European evidence. *Journal of Accounting Research*, 18(1), 64–76.
- Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), 1–15.
- Haller, A. (2002). Financial accounting developments in the European Union: Past events and future prospects. *The European Accounting Review*, 11(1), 153–190.
- Jarrar, N. S., Smith, M., & Dolley, C. (2007). Perceptions of preparers and users to accounting change: A case study in an Australian university. *Managerial Auditing Journal*, 22(1), 80–94.
- Joos, P., & Lang, M. (1994). The effects of accounting diversity: Evidence from the European Union. *Journal of Accounting Research*, 32(Suppl), 141–168.
- Kvaal, E., & Nobes, C. W. (2010). International differences in IFRS policy choice: A research note. Accounting and Business Research, 40(2), 173–187.
- Le Manh, A. (2017). The role and current status of IFRS in the completion of national accounting rules evidence from France. *Accounting in Europe*, 14(1–2), 94–101.
- Nobes, C. W. (1983). A judgmental international classification of financial reporting practices. *Journal of Business Finance and Accounting*, 10(1), 1–19.
- Nobes, C. W. (1998). Towards a general model of the reasons for international differences in financial reporting. *Abacus*, 34(2), 162–187.
- Nobes, C. W. (2006). The survival of international differences under IFRS: Towards a research agenda. *Accounting and Business Research*, 36(3), 233–245.
- Nobes, C. W. (2011). IFRS practices and the persistence of accounting system classification. *Abacus*, 47(3), 267–283.
- Ousama, A. A., Fatima, A. H., & Hafiz Majdi, A. R. (2011). Usefulness of intellectual capital information: Preparers' and users' views. *Journal of Intellectual Capital*, 12(3), 430–445.
- Paoloni, P. (2006). Il bilancio delle piccole imprese nella prospettiva internazionale [Small undertakings' financial statements: An international perspective]. Turin: Giappichelli.
- Quagli, A., & Paoloni, P. (2012). How is the IFRS for SME accepted in the European context? An analysis of the homogeneity among European Countries, users and preparers in the European commission questionnaire. Advances in Accounting, 28(1), 147–156.
- Quagli, A., Ramassa, P., & D'Alauro, G. (2015). The new European Directive and the balance between users and preparers. European Journal of Economics, Finance and Administrative Sciences, 72(February), 55–75.
- Roberts, A. (1995). The very idea of classification in international accounting. *Accounting, Organizations and Society*, 20(7–8), 639–664.
- Schiebel, A. (2008). Is there a solid empirical foundation for the IASB's draft IFRS for SMEs? [online]. Accessed December 30, 2016, from http://ssrn.com/abstract=994684
- Sinnett, W., & De Mesa Graziano, C. (2006). What do users of private company financial statements want? New Jersey: Financial Executives Research Foundation.
- Van Hulle, K. (1992). Harmonization of accounting standards. A view from the European Community. *The European Accounting Review, 1*(1), 161–172.
- Van Hulle, K. (1993). Harmonization of accounting standards in the EC. *The European Accounting Review*, 2(2), 387–396.

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Venuti, M. (2012). The proposal for updating the EU Accounting Directives: The adequacy of the proposal versus the legislative targets. *Financial Reporting*, 4, 65–85.

- Walton, P. (1997). The true and fair view and the drafting of the Fourth Directive. *The European Accounting Review*, 6(4), 721–730.
- Walton, P. (2015). IFRS in Europe an observer's perspective of the next 10 years. *Accounting in Europe*, 12(2), 135–151.

# CSR Ratings and Contradiction of Real and Communicated Aims of Media Organization: The Case of News Corporation



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**Abstract** The article aims at the critical analysis of Corporate Social Responsibility (CSR) ratings in accordance with reports presented by the largest organization which evaluates corporate social responsibility—the CSRHUB. The analysis refers to media corporations, such as News Corporations, and it aims at providing an answer to the question how the crisis of social trust towards media which belong to a media corporation affects their CSR ratings. In the article, there have been two hypotheses formulated: (1) the complex character of social, political and market aims pursued by media corporations is not clearly reflected by CSR ratings; (2) the comprehensiveness of CSR ratings does not contribute to the identification of key threats which result from the lack of social responsibility in a media corporation. The analysis indicates that—in their scope which is difficult to verify—CSR ratings of media corporations take into consideration the following elements: media specificity, and lobbying nature of some organizations (e.g. News Corporation). Their complexity and aggregated character makes it difficult to identify the sources of the problem. Furthermore, image disasters of particular entities within corporations insignificantly affect their CSR ratings.

**Keywords** CSR · Media corporation · News Corporation

## 1 Introduction

A contemporary discourse on ideas related to corporate social responsibility has been recently intensified by social pressure evoked by some ethical catastrophes of media organizations which have taken place over the last few years. Considering that reason, the discussion about the needs of implementation and communication of information on corporate governance, ethical practice and social responsibility has become particularly up-to-date.

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The concept of corporate social responsibility is based on a belief that corporations should act in a responsible way. There is a need for greater transparency in business operations carried out by corporations after the scandals involving Enron, WorldCom, Tyco and others. It also refers to a belief that corporations have more significant tasks to perform than just earning money for their shareholders. Reinforced by a decline in trust towards corporations after the financial crisis, such a belief defines a problem of corporate social responsibility as a serious challenge.

The article aims at the critical analysis of CSR ratings in accordance with reports presented by the largest organization which evaluates corporate social responsibility—the CSRHUB. The analysis refers to media corporations. In the article, there have been two hypotheses formulated: (1) the complex character of social, political and market aims pursued by media corporations is not clearly reflected by CSR ratings; (2) the comprehensiveness of CSR ratings does not contribute to the identification of key threats which result from the lack of social responsibility in a media corporation.

The analysis indicates that—in their scope which is difficult to verify—CSR ratings of media corporations take into consideration the following elements: media specificity, and lobbying nature of some organizations (e.g. News Corporation).

## 2 Concept of Corporate Social Responsibility

The concept of corporate social responsibility has developed on the basis of redefinition of relations between business organizations and social environment. Although its core, that is namely: responsibility in business operations, has been stable, it has obtained a number of new interpretations as one of important but controversial initiatives. Hence, simple, bipolar definitions of CSR (Eells 1960) are accompanied by other definitions which emphasize various contexts: legal aspects which are focused on intentions of an organization, information, efficiency, a model of a pyramid structure of responsibility of an organization presented by Carroll (1991), which involves four areas—economic, legal, ethical and philanthropic. Moreover, CSR is supposed to contribute to economic development with simultaneous demonstration of respect towards people, local communities, nations and environment. CSR integrates concepts of global citizenship with a concern for natural environment and sustainable development.

In a popular definition of CSR, at the stage of developing their operational strategies in their changeable environment, corporations consider such elements as social interest, protection of environment and relations with various groups of stakeholders (Donaldson and Preston 1995). In a holistic approach formulated for the requirements of the European Committee, responsible business is viewed as an influence exerted by companies on the society, in accordance with legal standards and with consideration of relations developed with social partners in order to maximize common values for customers, partners, owners and the society as entirety.

Although the multithreading character of definitions considered here may suggest the lack of consent on the general interpretation of CSR (Moir 2001), it is possible to assume that it involves consideration of responsibility outside the strict economic, technical and legal requirements and achievement of social advantages along with traditional economic advantages. In other words, it comes as a concern for influence exerted by all the corporate operations on social welfare and consideration of social standards (Bowman and Haire 1976). The concept of CSR is therefore shaped based on a belief that business organizations shall act in a responsible way, and they do not only pursue business targets, but they also follow their economic, social and environmental imperative.

In practice, CSR is presented in annual reports, publications in social campaigns, charity activities or cooperation with non-government organizations. Such forms suggest that CSR comes as a form of interaction between organizational authorities and community, which aims at the formation of external perception of organizations (Deegan 2002). It refers to responsibility for consumers, employees and shareholders, responsibility for environment and for the development of a local community. Communication of CSR activities is addressed to (current and potential) shareholders, employees, customers, media and government—for the sake of an image and perception of an organization and its brands.

## 3 Reasons for CSR Implementation

The reasons for which CSR is applied can be explained with political economy and concepts involving relations with shareholders. CSR is explained as a form of social agreement or an element of marketing strategies (Luo and Bhattacharya 2006). Studies on the implementation of corporate social responsibility allow us to draw general conclusions that the most important factor which exerts pressure on the consideration of social responsibility in business are managers and owners of economic entities. Companies appear to be rather passive elements, objects on which pressure is exerted and which must respond to such pressure (Tempel and Walgenbach 2007). If there is no pressure, mangers assume only some elements of CSR, or they ignore the whole concept.

Furthermore, research on CSR indicates that the profit, value for shareholders or any other economic aims are still at the top of corporations' agenda. The whole concept is understood as referring to widely understood values, but there is a dominating assumption expressed by the owners and administrators about its positive impact on the improvement of organization performance (Matten and Moon 2008). Moreover, CSR activities are fostered by the listing of company shares on the stock exchange—investors expect such implementation, because it positively affects corporate governance. Generally, CSR is most frequently implemented under pressure. Its sources may be different: competition, pursuit after the loyalty of current customers which should be maintain, an increase in the market awareness/orientation of consumers/users, the phenomenon of consumerism, a civil and institutional

movement which aims at more rights and larger representation of consumers in relation to sellers, pressure and expectations of non-government organizations. However, the most important factor which exerts pressure on the consideration of social responsibility is management staff and owners of economic entities. Enterprises come as passive elements, objects of pressure which must respond to it (Tempel and Walgenbach 2007). If there is no pressure, managers assume only some CSR elements, or they ignore the whole concept (Campbell 2007).

The research on CSR also proves its institutionalization; numerous scandals, frauds and the problems of the whole economic system are referred to broader corporate social responsibility. The proofs of such institutionalization can be training courses for specialists in CSR implementation, development of market tools, occurrence of such instruments as specialist CSR reports, training courses in ISO 14001 implementation and university programs dedicated to CSR. The fundamentals and practice of management in the context of corporate social responsibility are interpreted within the theory of institutionalism (Wilson 1989). While making decisions and running business operations, management staff are affected not only by rationalism, but they also consider moral arguments and "economic psychology"; it allows us to observe rapid intensification of a discourse on concepts which spring out of institutionalism. The macro-institutional pressure exerted on enterprises in order to make them involved into social responsibility is analyzed within the frames of the above-mentioned discourse, along with relations among neo-institutional concepts, social responsibility and sustainable development (Aguilera et al. 2007). There is also some research carried out on the question whether organizations which operate at one particular location (e.g. in one country) must meet people's expectations whereas organizations which operate globally must respond to global expectations (Newson and Deegan 2002).

The above-mentioned context refers to the concept of sustainable enterprises oriented towards the satisfaction of a highly competitive market, which must maintain their competitive market position (Pellicano et al. 2014). Such sustainability must consider interests of various groups and provide users outstanding values. In such enterprises, the prior task is to manage the capital of knowledge, trust and innovation in the conditions of constant operational discontinuity.

## 4 Criticism of the CSR Concept

In theory of management, CSR activities and social objectives assumed by enterprises are also defined as a false value which actually weakens enterprises, affects the incurred costs and eventually contributes to impoverishment instead of enrichment. It limits competition and weakens market economy; it also means aberration of business. Generally, the use of business resources for non-business purposes is the theft of means which belong to their owners. Such an assessment is followed by some allegations which refer to organizations, which have not been elected during the democratic election process, but can still form public opinions and promote the concept of corporate social responsibility.

Critics of CSR emphasize the superficial character of such practice which is most often performed within the framework of public relations activities (even if it is included into the general strategy of an organization), by the same units/parts of an enterprise. They come as a part of the operations which are aimed at an increase in the brand value, and CSR efficiency is measured from the perspective of public relation targets, or alternatively, from the perspective of human resource management. Briefly speaking, the consumer-investor dimension of media operations contributes to the fact that CSR is perceived as an activity which is of apparently pro-social nature but which actually aims at an increase in business value of a company through some improvement of its image as a producer of goods and services.

The criticism of CSR has been evolving in time. Vogel (2007) proves that in 1970s the literature on corporate social responsibility was focused on the promotion of civil values among corporations. However, during the next decade, when a neo-liberal political and economic concept started to dominate, the literature on social responsibility was not focused exclusively on making good for its own sake but on making good and take advantage of it. As Maak (2008) firmly states, the fiasco of the CSR concept has contributed to a new approach towards the relation between an enterprise and its social environment, in a form of an idea of social integrity of an organization. Organizations function at various levels, and only together they form corporate self-consciousness. The foundation of the concept refers to the following of moral principles, mutual trust and respect towards the other party's opinion.

A critical analysis of operations carried out by media corporations is provided by Gulyás (2011), who presents her concept of an ideal media corporation, including the CSR analysis of the largest media corporations between the years 2000–2009. The author defines such activities as relatively modest, and she concludes that a low level of social trust towards them should not be surprising. Although CSR communication provided by trans-national media corporations has been more and more intensified, such intensification should be referred to a very low starting level, and it may turn out to be nothing more than just an element of a general trend in the market which attracts more attention to CSR. Furthermore, communication of social responsibility comes as a part of efforts made by PR departments of media corporations in order to improve the image of their corporations—and not a genuine transformation process within corporations which would try to meet social expectations.

## 5 CSR of Media Organizations

More frequent CSR communication provided by media organizations is attributed to the growing awareness of corporate responsibility, which was once defined as striving for being good corporate citizens (Ingenhoff and Koelling 2012). Such an

attitude can be moderated by media which come as a platform for a public debate, shaped by the leaders of the political discourse, topics, problems referred to in the public discourse or cooperation between journalists and corporations. At the same time, CSR strategies aim at the satisfaction of demands presented by the stakeholders of media organizations. Hence, media organizations must demonstrate their social responsibility in their operations (Han et al. 2008).

Considering such a context, a division into issues of media governance and issues of CSR commitment of media in their internal operations (Ingenhoff and Koelling 2012) becomes significant. Media governance refers to the issues of journalism, such as guidelines, mechanisms of control, sanctions, independence of editorial boards, competition, self-promotion, minority, high quality of the provided contents and involvement of recipients. Although literature emphasizes the difference between the influence of media on CSR application and CSR application inside media organizations themselves (Hou and Reber 2011), only in the latter case their social functions and social mission coincide largely with the principles of social responsibility, considering the specificity of media management (Batko and Kreft 2017).

As far as media management is concerned, the conceptualization of CSR in media refers to the specific character of media organizations, manifested by the fact that media organizations act in a double role:

- operation in their social environment which has significant possibilities to criticize (in a fair or an unfair way) corporate practice, especially in Web 2.0 (Kesavan et al. 2013),
- entities which can exert pressure (mobilize public opinion) in order to make other entities apply CSR (Islam and Deegan 2010).

Hence, the specific character of media organizations is manifested in the context of CSR activities when such organizations act as reviewers/commentators of economic and social operations, doing so on their own behalf or as a platform for others to express their opinions. Media can also exert pressure (and mobilize public opinion) in order to make others apply CSR. The sources of CSR in media organizations can be found in journalists' occupational ethics (Sandoval 2013). Considering such a context, there have been attempts to adapt some previously developed models to media organizations, assuming them for the foundation of responsibility of editorial boards, whereas less attention has been paid to the influence exerted on editorial boards by media owners. The attempts have been followed by skepticism expressed by media management, especially management of public media. It has indicated some tardiness of media corporations in the implementation of best CSR practice (Lee and Carroll 2011).

CSR conceptualization in media organizations is also referred to a network of relations in the media sector, especially to expectations towards newsrooms, those which are openly formed and those which are implicit, which both refer to responsibility to shareholders and society. It involves the following:

- transparency of the editorial work (separation of information from comments and opinions),
- interference of the owner of a media organization into editorial contents,
- protection of privacy,
- consideration of the right of the society to obtain information and the right of individual people to have their privacy protected,
- responsibility for the publication of information/pictures which are particularly drastic and offensive for the society,
- protection of the privacy of the underage,
- responsibility of media for presented advertisement,
- promotion of advertisement which promotes sustainable consumption,
- obligation to educate and to inform.

Considering such a context, the theory of social responsibility of media is defined as (McQuail 2010):

- obligations of media towards the society; the ownership of media comes as the good entrusted to their owners by the society,
- news providing media should be truthful, reliable, honest, objective and accurate,
- media should be free, but they must undergo the process of self-regulation,
- media should follow the accepted ethical codes and good professional practice,
- in some circumstances the government might be obliged to intervene in order to protect public interest.

In the model of social trust, the public opinion expects, even in an unconscious way, that media should act in the service of public interest, especially in such fields as information and culture. The satisfaction of those expectations is to be guaranteed by such bodies as press and broadcasting councils. The advantage of such relations is their continuity, however the disadvantage refers to their voluntary character. In such a situation, some media organizations refuse to accept such commitment and, except for public media, they do not form any consistent system of responsibility. In the model of social trust, the audience designates media to the particular people in the act of trust. This idea is close to the concept of trusteeship with regard to public media. Consciously or not, public opinion expects media to serve the society. Press and broadcasting councils are supposed to guarantee that social expectations shall be met.

## 6 Research Methodology and Hypotheses

The above-presented considerations on the essence of CSR and the specific character of media organizations indicate that although CSR criticism has numerous aspects, it is not related to the differentiation of the particular sectors; it has non-sectoral nature. Also, CSR practice makes little reference to the specific character of sectors. Observations on the problematic validity of CSR application are exceptional in the consideration of media organizations, which are characterized by the influence of

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social reasons. The specificity of media organization, especially their social influence is rarely considered in CSR analysis.

In the light of such a research gap, the following research question has been formulated: how do CSR ratings consider problems of particular media companies within media corporations, and do they consider actual aims of media corporations? The following research hypotheses have been formulated:

- the complex character of market, social and political targets of media corporations is not clearly reflected in CSR ratings;
- the complexity of CSR ratings does not foster identification of key threats which result from media corporation management.

For the requirements of the analysis, a case study has been applied. A case study provides extensive knowledge on the analyzed phenomenon, it allows scientists to provide its comprehensive and detailed description in order to draw conclusions referring to the reasons and results of its course. It comes as an example of an empirical method because the analysis and evaluation are performed for the phenomena which take place in the reality. A case study is a research method common for various scientific paradigms. Depending on the aims and the relations with the developed theory, a case study comes as a convention in thinking about the reality, a theoretical construct, an empirical research object or an empirically recognized entity (Ragin and Becker 1992).

In accordance with a general definition which does not refer to any particular divisions, it is a research situation in which the number of variables considerably overtops the number of observations (Yin 2013). It is suitable when the significance of the analyzed phenomenon is to be recognized. In order to obtain particular results, various types of techniques applied to collect and analyze data are used. The main advantage of a case study is a possibility to confront theoretical assumptions with the real course of a selected process or phenomenon. A single case study is also a proper method when it seems to be a critical test of a current theory, and it refers to a rare or unique event. It is a useful method when scientists have little influence on the analyzed phenomenon, when it is a contemporary phenomenon and when a research question is confined to "how" and "why"?

# 7 Crisis of Trust Towards Corporations

A discussion about the ideas referring to social responsibility of media corporations is fueled by social pressure related to some ethical catastrophes of corporations. For this reason, the discussion about a need of implementation and communication of information about corporate governance, ethical practice and social responsibility has become current again (Bondy et al. 2012).

After the scandals involving Enron, WorldCom, Tyco and others, a need for greater transparency in the operations of corporations has been related to a belief that corporations have to perform some more important tasks than just earning money for

their shareholder (Owen 2005). Reinforced by a decline in trust towards business after the financial crisis, such a belief defines a problem of corporate social responsibility as a serious challenge which cannot be ignored in the discussion about the operation of media corporations.

In the discussion about corporate social responsibility two main trends may be distinguished. On one hand, the discussion refers to the operation of such entities which are controversial because of the harmful character of their products (tobacco), or their operation affects natural environment (mining, fuels), or because it affects welfare of their employees and labor standards (well-known cases of Nike and Gap). On the other hand, however, social responsibility of business leaders is analyzed, especially in the United States of America. In such a context and with the consideration of CSR ideas, the role of media refers to three tasks:

- for non-media organizations, they are a channel that can be used to communicate their social responsibilities;
- they are (almost) a guardian of social trust, an auditor of corporate operations;
- they are stakeholders of non-media corporations. People or groups of people who have various claims, ownership rights or interests in corporations and their operations in the past, present and future (Clarkson 1995). Their mutual relations are affected by current and previous experience, intended or potential relations, concerns and hopes which are pinned on them.

Although the social influence of corporations, as the leaders of media market, seems to be obvious—especially in the era of social media development,—the question of current social responsibility of media organizations can be found in very few publications (Grayson 2010).

## 8 The Case of News Corporation

The success of News Corporation sprang out from high profitability of R. Murdoch's Australian newspapers, which allowed him to purchase British tabloids, *News of the World* and *Daily Herald* in 1981, and to purchase *The Times* and *Sunday Times* shortly afterwards (Marjoribanks 2000).

At the end of 1980s, News Corporation started its expansion in the United States of America, and News International became a large press publishing company which started its own expansion in the market of magazines, looking for synergy and purchasing Triangle Group 26 (the publisher of TV Guide) Harper & Row, William Morrow Company, Avon Books, Amistad Press and Fourth Estate. After those investments, the Australian corporation became the largest integrated publisher of newspapers, periodicals and books in the world (Thompson 2013).

After an unsuccessful attempt at the acquisition of Warner Communications, News Corporation purchased Twentieth Century Fox (the publisher bought the producer of contents in entertainment business). Then, the range of operations performed by News Corporation was once again extended by the acquisition of Metromedia—a chain of independent broadcasting stations located in American metropolises. The target of the company was to establish the fourth (after ABC, CBS and NBC) large TV station—a leading distributor of media contents developed, first of all, by the above-mentioned Twentieth Century Fox.

In 1983, News Corporation purchased the shares of American Satellite Television Inc., which used to let its transmitting relays on telecommunication satellites (referred to as transponders); in that way the corporation intended to obtain access to satellite television. This attempt, however was ended with a failure and serious financial loss, and it made News Corporation purchase the controlling interest of Sky Television, a pan-European channel. However, it was not until 1989 when the corporation accessed the British market, and 2 years later it succeeded in the acquisition of its main competitor, British Satellite Broadcasting (BSB). The establishment of British Sky Broadcasting allowed News Corporation to win a strong position in Great Britain and to take advantage of high entry barriers which were caused by a rapid growth in the prices of contents (BSB benefitted from long-term license agreements with the most important Hollywood producers; it also entered a unique agreement for the broadcasting of the top British league football matches).

News Corporation comes as an example of a global business model, based on a global corporation network in which tolerance for multiplication (and proliferation) of style and control can be observed together with decisions made in various parts of the network, as long as the centre of the network allows particular practices to occur within the network empire (Louw 2001). News Corporation presents significant flexibility, especially in specialized, niche media platforms. In such conditions, News Corporation has been transformed from a corporation, the resources of which were dominated by newspapers and magazines in 1980s, into a corporation where 63.7% of resources are films, television, satellite and cable networks (Flew and Gilmour 2003) and which is involved into the Internet operations.

News Corporation can be defined as both: global in terms of media business and sustainable in terms of internal strategy of management. As one of the largest media corporations, News Corporation is not only a strong economic entity but also one of the largest producers of media contents which is available for approximately <sup>3</sup>/<sub>4</sub> of globe inhabitants (Arsenault and Castells 2008). It is a corporation which has been actively lobbying in favor of the dominance of business targets along with the implementation of political targets (Sandoval 2014).

Such an image of the corporation, managed over the decades by one leader (Rupert Murdoch), indicates some exceptional practice in business relations. The involvement of News Corporation into the market of financial press in 2007 through the purchase of Dow Jones Company (Wall Street Journal) came as a reflection of the corporate strategy after some correction and as an attempt at exerting more influence on the world of business by the purchase of the brand and strategic resources that could provide competitive advantage. We are witnessing a historic moment when the contents and digital distribution meet with the rising significance of sophisticated systems of micropayments which means that the value of business analysis and information can be much more precisely defined in the price of the contents—in this way the investment was explained in the report for the investors of

News Corporation in 2007. Indeed, the purchase of one of the most influential, widely recognizable and highly estimated brands of business journalism allowed News Corporation to charge the Internet users with small fees for the access to its contents. The Indian and Chinese edition of Wall Street Journal allowed News Corporation to reach precisely the target groups which were most desirable when viewed from the perspective of global advertisers, providing fast growth in the income earned on advertisement in those markets (Castells 2013). Although business websites do not have large numbers of recipients, these users are usually rich people with strong political and economic influence (Schejter and Davidson 2008). A conviction about a possibility to influence the discourse run by opinion-forming media can be also significant; in the market of ideas, the contents, which reach media recipients, affect larger social groups through the elites. Using the metaphors of a free market, often taking a form of market populism which emphasizes the utility of free market solutions in all the fields of social life, a discourse run by such media may be treated as a key consequence and a reason for mergers and acquisitions. Business information has potentials to become a "vehicle" for distribution of free market views.

According to Murdoch (News Corporation 2007) himself, the acquisition of Wall Street Journal was a key market movement, because considering the resources of the whole Corporation, there has been developed a unique possibility to access the content of Wall Street Journal on each media platform in the world, which comes as a serious challenge for CNBC, Reuters and Bloomberg. In order to protect the editorial policy of Wall Street Journal against the interference of the new owner, a unique buffer structure was developed between the new owner and the editorial board of Wall Street Journal (Arsenault and Castells 2008). The parties of the agreement were perfectly aware of quite an embarrassing reputation of Murdoch who was referred to as "the king of media", "the minister of communication in the global village", and who won the status of a paradigm among the opponents of influence exerted by media corporations (Arsenault and Castells 2008). In such a situation, News Corporation decided not only to pay a considerably higher price for the shares of Dow Jones in comparison to their market price, but also agreed to accept the special terms of the acquisition. A unique model was developed: a model of a trustee in which a special committee was established. The committee consisted of the members of a selected community or leading journalists who were independent from both merging corporations. Their task was to preserve editorial integration and independence and to guarantee unprejudiced publications and information services (Schejter and Davidson 2008).

The network structure of News Corporation (in terms of media, business and policy) has been developed on the basis of the sets of basic targets. Hence, the significance of the corporation is not related to one particular connection and any political relation in one country, at any particular moment; first of all, political relations are supposed to increase the market significance of News Corporation as a whole entity. A direct reason for the division of the corporation in 2012 was a series of crises, especially the phone hacking crisis involving the editorial team of *News of the World*. In the first issue of *News of the World* from 1843, its editorial

board declared: *Our motto is the truth, our practice is fearless advocacy of the truth* (Hendriques 2011). In 2011 the phone hacking scandal eventually led the newspaper to a fall and a crisis of trust towards News Corporation as the owner of such a significant asset as *News of the World* (Carlson and Berkowitz 2014). The incident was exceptional and spectacular, so it was widely commented and interpreted in media.

A decision about an end of *News of the World* again found a lot of interpretations. The relevance of the following opinion can be considered here: News Corp is not a news company at all, but a global media empire that employs its newspapers—and in the US, Fox News—as a lobbying arm. The logic of holding these "press" properties is to wield influence on behalf of the rest of the (much bigger and more profitable) media business and also to satisfy Murdoch's own power urges. The opinion springs out of corporate culture. For the employees of News Corporation it can be interpreted as information corporation, for recipients, however, information is not a dominant business of the organization—it is power. In such an organization journalism is practiced for corporate targets and ignorance of standards has always been the greatest corporate competitive advantage (Chittum 2011).

Such a conclusion, a description of a media corporation as a Murdoch's lobbying empire is not consistent with an official and dominant statement which forms a legend of a media corporation, based on such iconic media notions as the First Amendment to the United States Constitution, journalism or public service. The network structure of News Corporation (in terms of media, business and policy) has been developed based on the sets of basic targets. Hence, the significance of the corporation is not related to one particular connection and political relation in one country, at a particular moment; first of all, political relations are supposed to increase the market significance of News Corporation as a whole entity.

## 9 CSR Rating

CSR activities are particularly often observed in the operation of the largest business entities; the greater social exposure of an organization, the greater the need for the legitimacy of its existence in the social environment (Patten 1991). Such great exposure is a characteristic feature of media organizations, especially media corporations. Organizational legitimacy occurs when the values of an organization are consistent with the system of values characteristic for a larger social system to which the organization belongs as its part.

CSR ratings can be observed in numerous reports which provide a comparison of such activities, divided by sectors. Considering the strategic operations of corporations, such reports are provided by the largest organization which analyzes and evaluates corporate social responsibility, namely: CSRHUB (CSRHB). In this case, an analytical tool is a ranking which comprises the following categories: community (human rights, product safety and quality, philanthropy), development of community (relations between an organization and the community/ties in which it functions,

corporate volunteering), products (responsibility for the design, product and service management, their influence on consumers), employment issues (efficiency of employment programs, employee loyalty, social relations, compliance with the labour law), protection of natural environment, management of resources, quality of management (including compliance with ethical principles presented by the leaders and the transparency of their operations.

The rating also refers to the ethical aspects of management. Considering the category of Ethical Leadership, the measurement concerns the following issues: how a company manages its relations with its diverse stakeholders, including investors, customers and regulators, as well as the effectiveness of the company in treating its shareholders and employees fairly. Considering the category of Transparency, the rating refers to corporate policies and practices aligned with objectives of sustainability, including the degree to which company management is transparent for its stakeholders (CSRHUB).

In order to obtain data required for its rankings, CSRHUB uses the database of Thompson Reuters, Carbon Corporate Library, Disclosure Project, EIRIS, IW Financial, Risk Metrics IVA and Impact Monitor, Trucost and Vigeo (CSRHUB). CSRHUB's ratings allow corporate branding, supply chain, PR, and sustainability managers, consumer activists, foundations and non-governmental organizations, researchers, and reporters to understand and compare the sustainability performance of the world's major corporations. Rather than setting a single standard for CSR performance, CSRHUB enables its users to create a profile of their own values. The site then tailors its company performance ratings to those values, and links transparently to its sources, so that users can see the original data behind the ratings where publicly available (CSRHUB LLC 2010).

The article refers to an overall rating of CSRHUB. The overall rating follows beta distribution and the idea is that there is a standard for each 12 different measures and 4 main categories the overall score is composed of. The companies which follow the standard are given the rating at the level of 50 on the scale from 0 to 100. If CSR is below the standard, the rating can reach the level from 0 to 49. Companies which exceed the expectations are given the rating at the level of 51 up to 100. Because each company is rated on the basis of various sources, the total score comes as an average of these ratings. Hence, the rating is a collective perception of each particular company, and, as the CSRHUB creators declare: there is however always the chance that the collective is wrong and the actual quality of a disclosure is higher or lower than the rating indicates (CSRHUB LLC 2017).

Considering the case of the News Corporation rating, its accuracy and conscientiousness is to be proved by the reference to almost 3000 pieces of information obtained from 23 sources. It is possible to learn, for example, that News Corporation—unlike other major trans-media corporations—is not a member of Business for Social Responsibility (BSR), Ceres and Committee Encouraging Corporate Philanthropy (CECP). The corporation does not participate in the work of Environmental Defense Fund's Climate Corp. which obligates its members to publish CSR reports. Moreover, it does not support the Global Compact idea of the United Nations, and it has never joined the US Climate Action Partnership (USCAP). Considering such absence, it is

possible to suspect that News Corporation has not been purposefully involved in any counteraction against harmful climate changes. When this aspect comes to the CSR rating, the corporation agrees to have its rating lowered in that respect. Consequently, it receives a relatively low score of 49 in the category of Management, which means that it does not make use of its resources in management processes, and of 47 in the sub-category of Ethical Leadership, which might mean some inconsistency of its internal policy.

The analysis of the CSR rating for News Corporation indicates that during the years 2010-2012 its fluctuation was quite inconsiderable ( $\pm 6$  points). The ratings of the corporation in the category of Society were low (40-44) and Employment (41-44); they were higher in the categories of Natural Environment (56-57) and Management (48-50) (CSRHUB).

The above-presented laconic description of the CSR analysis for a corporation does not mean that all such data sets are received without any criticism; they sometimes give a reason for a dispute, as in the case of News Corporation. Considering its ranking position, there were some allegations that the influence of products provided by media corporations was not considered in the discussion about climate changes (Toffel and Schendler 2012). On one hand, the corporation decided to take a neutral stand towards climate changes, on the other hand, however, it became engaged into negation of such changes in its TV broadcastings and publications.

Such a description provided by CSRHUB is followed by other analyses, among others, provided by the Corporate Library, which classifies companies in the categories from A to F. News Corporation used to obtain F regularly—the lowest rating, only *because there was not any lower rating;* the risk of the purchase of the corporation shares was evaluated as very high (Chittum 2011).

News Corporation is a corporation which does not provide any information in the form of CSR reports, although there are numerous examples of activities in that field. The analysis of changes in the CSR rating of News Corporation allows us to draw a conclusion that although every year the corporation receives the worst rating, its stability suggests that such image catastrophes as the scandal involving News of the World, do not affect the fluctuation of the ratings in a significant way. It should be added that in the press sector, News Corporation is an owner of several dozen titles and some of them communicate their own social responsibility by informing about their own activities in that field. These examples, however, do not refer to the core of the operation carried out by a media corporation, that is namely: following journal-ism standards within the frames of the particular publishing companies.

### 10 Conclusions

CSR ratings aim at the comparison of business social responsibility in various organizations. The CSR concept has been evolving along with the research which allows us to draw new significant conclusions. The specific character of the functioning of media organizations, especially their responsibility in the field of media

social influence, is weakly reflected in the CSR theory. The subject of the analysis presented in the article is CSR of media corporations, with special consideration of News Corporation. The analysis allows us to formulate the following conclusions:

- the average ratings of corporations limit the possibilities of identifying some serious threats in the particular divisions,
- the average ratings and their complex construction allow us to identify threats in a limited way.

The applicative conclusion is formulation of general assessment which should be followed—at the level of the aggregated result—by some stipulations referring to various aspects of corporate operations. In a corporation, which consists of divisions and hundreds of entities, a problem referring to one or several companies is covered by some better ratings obtained by other entities. Hence, the averaging of other numerous ratings provided by CSRHUB does not allow us to assess their influence on the general rating of the particular corporate divisions. The complexity of the rating is therefore its advantage and disadvantage at the same time.

The application of CSR standards in media organization comes as a derivative of seeing them as organizations which not only perform social functions but which are also oriented towards basic business targets: profits, maximization of gain for their shareholders and an increase in their market share. On one hand, such a perspective forces them to apply better standards by the implementation of the latest CSR solutions which become a part of their strategy. On the other hand, the financisation of media and growing significance of market operations allow us to formulate a hypothesis that from the perspective of social responsibility, differences between media and non-media organizations disappear. The most important activities are oriented towards stakeholders/shareholders and CSR activities gain the same character. Hence, the search for balance between the interest of recipients, users and shareholders remains just a mere declaration.

#### References

- Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *The Academy of Management Review*, 32(3), 836–863.
- Arsenault, A. H., & Castells, M. (2008). The structure and dynamics of global multi-media business networks. *International Journal of Communication*, 2, 707–748.
- Batko, R., & Kreft, J. (2017). The superfluousness of CSR in media organizations: Conclusions from public radio research in Poland. *Journal of Organizational Change Management*, 30(1), 91–105.
- Bondy, K., Moon, J., & Matten, D. (2012). An institution of corporate social responsibility (CSR) in multi-national corporations (MNCs): Form and implications. *Journal of Business Ethics*, 111 (2), 281–299.
- Bowman, E. H., & Haire, M. (1976). Social impact disclosure and corporate annual reports. *Accounting, Organizations and Society, 1*(1), 11–21.

- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *The Academy of Management Review*, 32(3), 946–967.
- Carlson, M., & Berkowitz, D. (2014). 'The emperor lost his clothes': Rupert Murdoch, News of the World and journalistic boundary work in the UK and USA. *Journalism*, 15(4), 389–406.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Castells, M. (2013). Communication power. Oxford: Oxford University Press.
- Chittum, R. (2011). Rupert Murdoch and the corporate culture of News Corp. *Columbia Journalism Review* [online]. Accessed January 12, 2017, from http://fortune.com/2011/07/19/the-trembling-at-news-corp-has-only-begun/0
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review*, 20(1), 92–117.
- CSRHUB LLC. (2010, December 8). CSRHUB joins the ranks of responsible businesses as a certified B Corporation. *CSRwire* [online]. Accessed January 12, 2017, from http://www.csrwire.com/press\_releases/31262-CSRHUB-Joins-the-Ranks-of-Responsible-Businesses-as-a-Certified-B-Corporation
- CSRHUB LLC. (2017). CSRHub schema description [online]. Accessed January 16, 2017, from http://www.csrhub.com/content/csrhub-data-schema
- Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65–91.
- Eells, R. S. F. (1960). The meaning of modern business. New York: Columbia University Press.
- Flew, T., & Gilmour, C. J. (2003). A tale of two synergies: An institutional analysis of the expansionary strategies of News Corporation and AOL-Time Warner. Managing Communication for Diversity, Australia and New Zealand Communications Association Conference, Brisbane, 9–11 July 2003
- Grayson, D. (2010). Corporate responsibility and the media. Economics, Management and Financial Markets, 5(3), 160–193.
- Gulyás, Á. (2011). Demons into angels? Corporate social responsibility and media organizations. *Critical Survey*, 23(2), 56–74.
- Han, E.-K., Lee, D.-H., & Khang, H. (2008). Influential factors of the social responsibility of newspaper corporations in South Korea. *Journal of Business Ethics*, 82, 667–680.
- Hendriques, A. (2011). Corporate truth: The limits to transparency. London: Earthscan.
- Hou, J., & Reber, B. H. (2011). Dimensions of disclosures: Corporate social responsibility (CSR) reporting by media companies. *Public Relations Review*, *37*(2), 166–168.
- Ingenhoff, D., & Koelling, M. (2012). Media governance and corporate social responsibility of media organizations: An international comparison. *Business Ethics: A European Review*, 21(2), 154–167
- Islam, M. A., & Deegan, C. (2010). Media pressures and corporate disclosure of social responsibility performance information: A study of two global clothing and sports retail companies. *Accounting and Business Research*, 40(2), 131–148.
- Kesavan, R., Bernacchi, M. D., & Mascarenhas, O. A. (2013). Word of mouse: CSR communication and the social media. *International Management Review*, 9(1), 59–67.
- Lee, S. Y., & Carroll, C. E. (2011). The emergence, variation, and evolution of corporate social responsibility in the public sphere, 1980–2004: The exposure of firms to public debate. *Journal of Business Ethics*, 104(1), 115–131.
- Louw, E. (2001). The media and cultural production. London: Sage.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70(4), 1–18.
- Maak, T. (2008). Undivided corporate responsibility: Towards a theory of corporate integrity. *Journal of Business Ethics*, 82(2), 353–368.

- Marjoribanks, T. (2000). News corporation, technology and the workplace: Global strategies, local change. New York: Cambridge University Press.
- Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. The Academy of Management Review, 33(2), 404–424.
- McQuail, D. (2010). McQuail's mass communication theory. London: Sage.
- Moir, L. (2001). What do we mean by corporate social responsibility? *Corporate Governance: The International Journal of Business in Society*, *1*(2), 16–22.
- News Corporation. (2007). *Annual Report 2007* [online]. Accessed January 12, 2017, from http://www.annualreports.com/Company/news-corporation
- Newson, M., & Deegan, C. (2002). Global expectations and their association with corporate social disclosure practices in Australia, Singapore, and South Korea. *The International Journal of Accounting*, 37(2), 183–213.
- Owen, D. (2005). CSR after Enron: A role for the academic accounting profession? *The European Accounting Review*, 14(2), 395–404.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, 10(4), 297–308.
- Pellicano, M., Vesci, M., Troisi, O., Cosimato, S., & Tuccillo, C. (2014). Stakeholder engagement for sustainable development in banking industry. An Italian case study (pp. 1–17). 13th EBES Conference, Istanbul, Turkey.
- Ragin, C. C., & Becker, H. S. (Eds.). (1992). What is a case? Exploring the foundations of social inquiry. New York: Cambridge University Press.
- Sandoval, M. (2013). Corporate social (ir)responsibility in media and communication industries. *Javnost-The Public*, 20(3), 39–57.
- Sandoval, M. (2014). From corporate to social media: Critical perspectives on corporate social responsibility in media and communication industries. New York: Routledge.
- Schejter, A. M., & Davidson, R. (2008). "... and money is answer for all things": The News Corp.— Dow Jones Merger and the Separation of Editorial and Business Practices. *International Journal of Communication*, 2, 515–542.
- Tempel, A., & Walgenbach, P. (2007). Global standardization of organizational forms and management practices? What new institutionalism and the business-systems approach can learn from each other. *Journal of Management Studies*, 44(1), 1–24.
- Thompson, J. B. (2013). *Merchants of culture: The publishing business in the twenty-first century*. Hoboken, NJ: Wiley.
- Toffel, M., & Schendler, A. (2012). Where green corporate ratings fail [online]. Accessed January 9, 2017, from http://hbswk.hbs.edu/item/6906.html
- Vogel, D. (2007). The market for virtue: The potential and limits of corporate social responsibility. Washington, DC: Brookings Institution Press.
- Wilson, J. Q. (1989). Bureaucracy: What government agencies do and why they do it. New York: Basic Books.
- Yin, R. K. (2013). Case study research: Design and methods. London: Sage.

# Part III Human Resources

# **Explanations of the Feminization Effects** in HR Profession and Beyond



**Zsuzsa Karoliny and Norbert Sipos** 

**Abstract** In this paper we aim to find out whether there is an empirical evidence of the queuing and the devaluation theory. Based on one cross-sectional and two longitudinal studies using Cranet Human Resource Management network data we redefine the indicators of Human Resource strategic integration. The paper investigates the characteristics of feminization and Human Resource integration in four regions of the world in two consecutive Cranet surveys (2008/10 and 2014/16); also extends this focus on the Hungarian marketing, Human Resources, and finance recent graduates based on Graduate Career Tracking System database 2011-2014. Our empirical findings add new aspects of gender-effect on the strategic role of Human Resource Management in four regions of the world, further weaken the explanatory power of the two theories. We can conclude our study with a positive statement: the glass ceiling seems to break in the Human Resources, and based on the Graduate Career Tracking System data, sticky floors no more characterize the gender differences in earnings. Human Resources profession seems fully feminized, marketing on its way, but finance succeeds to preserve still its positive characteristics for men.

**Keywords** Human Resources  $\cdot$  Feminization Effect  $\cdot$  Cranet Network  $\cdot$  Graduate Career Tracking System

### 1 Introduction

Throughout the history from the very beginnings, the labor-market was man-dominated. Nowadays due to demographic and other socio-economy changes the ever increasing penetration of women is a general phenomenon in almost every position. The nature and the fundamental reasons of their inflow vary greatly country

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by country; its influence is evidenced by the need for and presence of equal employment legislation. At the same time it is quite common to determine different patterns between men and women occupation: in general, women are overrepresented in low-paid occupations with low-status, while under-represented in well-paid occupations with high status (Ehrenberg and Smith 2003). This could be a demand-side discrimination, including an increased likelihood of hiring women for low-paying and men for high-paying positions (Fernandez and Mors 2008), which can lead to freezing the status quo.

Beyond the occupational segregation decrease (dissimilarity index value drop in the USA from 68 in 1970 to 53 in 1990) the pay gap between men and women showed significant national differences even within the developed regions and countries in the mid-80s (e.g.: Sweden 0.77; Germany 0.71) (Ehrenberg and Smith 2003).

The two most well-known theory groups explaining the relationship between sex ratio changes in occupation and positive aspects related to certain professions (such as high salaries, social prestige, status, good working conditions, etc.) are the queuing or relative attractiveness theory (Reskin and Roos 1990) and the mechanisms of social exclusion or devaluation theory (Murphy 1988; Reskin 1993; Steinberg 2001). The former one argues that the inflow of women into certain positions depends on two factors. First, employers rank potential employees into labor queues according to their attractiveness. (Gendered labor queues show the prevalence of employers' preference of men for managerial jobs.) Second, employees create also their occupation queues according to job attractiveness (if men are more likely to leave an occupation when its image do not correspond with male job characteristics, then women are more likely to apply for it.) This implies that in queuing theory status loss leads to the feminization of an occupational field, in our case the HR profession. The latter one focuses on the observation of how powerful groups within organizations exclude members from other groups create high authority positions to maintain their position. According to this theory, women are excluded from more powerful positions and receive less support for fulfilling their strategic role for many reasons: employers see women as better qualified for administrative work than for strategically important positions. Social exclusion mechanism thus suggests that status loss is a consequence of feminization.

Both approaches are strongly based on the cultural beliefs of genders, and explain the relationship between the two factors with the discriminative behavior of both employees as employers before and after the employment allocation and evaluation. They do not consider the reasons of employment based on gender or individual ability, life-situation dependency (mother-friendly), nor other preferences. The empirical analyses describe the trends of feminization in HR profession in general and in Europe in the decades of the new millennium. Two longitudinal studies and a cross-sectional analysis (focusing on the former socialist countries in Central and Eastern Europe) help to understand the basic assumptions of our research, where put emphasis on investigating the glass ceiling or the effect of the sticky floor for women—whether it is solid or breakable—in HR occupation, extending it for newly graduated other positions.

Two datasets are used: Cranet network<sup>1</sup> and Graduate Career Tracking System<sup>2</sup>. Cranet-network established in 1989 since then uses the same survey methodology, which ensures the comparability of the studies. The network collects and analyzes data of human resource practices from about 40 countries all over the world. Only some minor changes were applied in the original questionnaire of the survey in the past 27 years. Therefore the Cranet network can be used to support longitudinal and spatial diversity analyses. In the early years, they were conducted more frequently, in paper form, then in every 4–5 years, online. Its main objective is to find out whether:

- 1. the evolution of HR practices change in the direction of convergence, and
- 2. the changes in the field of personnel policy and practice are pushing for a strategic approach to human resource management (Brewster et al. 1996).

The Graduate Career Tracking System (GCTS) is a yearly base survey carried out by the higher education institutions in Hungary by the force of law, which consists of two parts:

- student motivation survey: to understand the current students' situation at the higher education, their opinion and suggestions about the course and service development, and
- 2. career tracking of graduates of 1, 3 and 5 years before: receive information about their socio-demographic background, further studies, labor-market fit, job searching period, salaries and job satisfaction.

GCTS, on the one hand, helps policy makers to better understand trends of employment of fresh graduates and contributes to the curricula development and personalization of the student related services.

# 2 Changes in HR Work and HR Professionals' Profile in Europe

In the late decades of the twentieth century, there were several shifts in the political and socio-economic conditions in the global environment and Europe, too. First, we have to identify their level of influence in HR Profession and HR Department's Status.

<sup>&</sup>lt;sup>1</sup>www.cranet.org University of Pécs, as a representative of Hungary is a Cranet member since 2004.

 $<sup>^2</sup>$ The Fresh Graduates database of 2011, 2012, 2013, 2014 were provided by the Educatio Non-profit Llc.

# 2.1 HR Department Configuration and HR Professionals' Profile

According to well-known findings of prominent authors (e. g. Schuler and Jackson 2007; Ulrich et al. 2009) and practitioners who studied the evolution of the role of HR department, several elements are indicating the influencing factors of this process. Such as: whether HR department ensures the fit of the HR and organizational objectives by long-term orientation; whether HR manager takes part of the top management and participates in every process of the business strategy development process, and also, by the integration of HR and business, an improvement in business performance is expected.

Brewster et al. (2006) foreseen the outsourcing of administrative HR, a delegation of HR functions to the line management and the spread of a 'lean-view' in the HR department due to economic pressure for rationalization. While Gomez-Mejia et al. (2004), based on the tendency of integration of HR and business and their effect on performance, expected a shift in HR position toward a more strategic role. According to Truss et al. (2002), it depends on the availability of the HR manager's competence profile, and on the increase of the ratio of women among HR managers is foreseen.

Lazarova et al. (2013), based on these elements mentioned above, investigated five factors to identify the real changes occurred in six regions of Europe (Anglo-Saxon, Germanic, Nordic Europe, South-Western Europe, South-Europe, Central and Eastern Europe) from 1995 to 2010 using Cranet network surveys. Their assumptions in relation to the *HR department's configuration* are as follows:

- 1. a decrease in the relative size of the HR department,
- 2. an increase of HR activities delegated to line managers,
- 3. a strengthening in the formal and written formulation of strategic intentions,
- 4. an increase in the ratio of women in HR managers among top managers and
- 5. an intensification of strategic integration of HR.

Their assumption in relation to the HR professionals' profile:

- 6. an increase in the appointment of HR managers recruited from the HR colleagues,
- 7. an increase in the proportion of HR managers, with certified higher education formation, mainly in the area of business and economics, and
- 8. a decrease in the percentage of men among HR managers.

In the case of the first 5 indicators, the authors could not find any clear trends in the 6 examined European regions. Only 2 factors (number 3 and 4) have shown a more or less straightforward convergence in the expected direction. From the last 3 (6–8) indicators, only the feminization of the HR profession was proven. The contradiction between feminization effect and the increasingly strategic role of HR was disclosed by this study, although it stayed unsolved.

## 2.2 Feminization of HR Profession and HR Department Status Changes in Western-Europe

Empirical studies conducted on feminization effects (significant increase in the proportion of women working in an occupation) in HR suggest that by the increase of women participation a decrease in salaries for both men and women can be observed (Hardin 1991; Roos and Manley 1996; Perales 2010). In the one-century long history of HR the rate of women has never been low, in most cases far outnumbered men in HR, and HR has also been interpreted as an occupation that 'suits women well'. Roos and Manley (1996) stated that a close relationship can be observed between status decrease and the rise of women's representation (or vice versa) from the very beginning of HR history until the end of the 1980s.

Reichel et al. (2013) aimed to explore this relation using the data of 11 Western European Cranet countries participated in both the two survey periods of 1995 and 2004/5 with a number of respondents 3491 and 2913 respectively (considered only HR managers or directors responses). They applied the queuing or relative attractiveness theory (Reskin and Roos 1990) and the mechanisms of social exclusion or devaluation theory (Murphy 1988; Reskin 1993) described in the introduction chapter. The former one states that status loss of an occupation conducts to the increase of women ratio, the latter one on the contrary, the inflow of women will lead to the status loss.

At the same time, the HR literature (Beer et al. 1984; Ulrich et al. 2009 and many others) expect and proves the increase of strategic role and strategic integration of HR. Reichel et al. (2013) aimed to dissolve this contradiction also. The three hypotheses and the main findings of their study were as follows:

- 1. Degree of feminization in HRM increased, which was *fully supported*: in all but one of the countries (Denmark) increased the mean percentage of female staff,
- 2. An increasing degree of feminization of the HR department leads to less strategic integration, which one was *rejected* due to the fact that an increase was observed in this field, and
- 3. In case of a change from male HR director to female HR director, the strategic integration decreases, and it was *rejected*, too, because women achieve a higher level of strategic integration when starting a manager position, no matter who (male or female) they succeed.

They propose several elements, approaches to consider in order to dissolve the contradictions between the theories: hierarchical differences (see Baron and Bielby 1985; Goodman et al. 2003); status difference of men and women among HR managers in Western Europe shows disadvantage for women; questions about the validity the explanatory power and statements of the basic theories; the demographic group power test (Pfeffer and Davis-Blake 1987) as an alternative theory approach; the institutionalization approach (Pfeffer and Davis-Blake 1987) could be useful investigating the thresholds of becoming a 'women job'; further clarification and

development is needed on the topic of strategic integration; the importance of utilization of contextual factors using different countries' data.

# 3 Extended Dynamics Analysis of HR Integration and Gender Aspects

This section uses the key findings and lessons learned from the previous investigations; it will analyze further elements of the *dynamics of the HR and its gender* aspects. In line with the literature review, we test the presence of a relationship between feminization and status loss using two datasets: Cranet network and Graduate Career Tracking System (GCTS).

Based on the literature review described above the two hypothesis of our current study are:

H1: The redefined strategic integration parameter helps to dissolve the contradiction between feminization and HR department's status progression.

H2: We expect that professions—HR and marketing—with a higher ratio of women in Hungary almost equal or minor difference of income will be shown, while in the finance sector (with a higher level of male participation) higher male salaries will occur.

This part of our study is based on two databases. The analyses of Cranet 2014/16 survey round focuses on four regions created upon the geographical distinction. The total number of HR manager respondents is 2628 using almost the same division into four regions: Central and Eastern Europe (CEE), European non CEE (EU non CEE), non-European Anglo-Saxon (non-EU Anglo-Saxon) and South-East Asia (SE Asia) countries.

- CEE = the 7 former socialist countries of Central and Eastern Europe (Croatia, Estonia, Lithuania, Russia, Serbia, Slovakia, Slovenia),
- EU non CEE = 15 additional European—or geographically close to Europe—countries (Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Israel, Italy, Norway, Sweden, Switzerland, United Kingdom),
- non-EU Anglo-Saxon = 3 non-European Anglo-Saxon countries (Australia, South Africa and the United States) and
- SEAsia = organizations of 2 South-East Asian countries and Turkey (Indonesia, the Philippines, and Turkey)

According to the view of Karoliny et al. (2015), the HR integration should be operationalized by the two-way integration of the HR. One element is the membership of HR manager in top management team (yes or no), and the other one focuses on the number of consultative decision-making (of line and HR managers) as the integration of business considerations into HR decisions. The latter is calculated based on the number of consultative decision-making (HR department alone; HR

Table 1 Scale of mutual integration of HR	Number of HI consultative d
	0

Number of HR areas with	The HR director of the top mana	
consultative decision-making	No	Yes
0	Weak (1)	Weak (1)
1		Medium (2)
2		
3	Medium (2)	Strong (3)
4		
5	Strong (3)	

Source: Karoliny et al. (2015, p. 9)

department in consultation with line management) practiced in the five key areas of HR (pay and benefits; recruitment and selection; training and development; industrial relations and workforce expansions). The three levels (weak, medium and strong) of the twofold integration of HR and business can be seen on Table 1.

To complete the results of the Cranet studies, we use the Graduate Career Tracking System 2011–2014 databases of fresh graduates to determine the possible differences between men and women in three chosen professions: HR, marketing and finance. The HR is in direct connection with the above-examined studies, the marketing and finance are considered as control groups since in our point of view marketing can be regarded as quite the same as HR, while finance should be more male dominated. Based on our previous results and the devaluation theory there should be a difference by gender for the women due to the status loss of HR and marketing. Since the GCTS is not suitable for drawing any conclusions regarding the strategic integration of the single respondents, we will use some limitations, and we will focus only on two areas as follows:

- 1. what differences can be seen by gender among the managers in the three professions, and
- 2. what differences, if any, can be seen by gender in terms of salaries.

The gender distribution contributes to our main focus; the issue of available income will test the validity of the devaluation theory.

GCTS respondents are all higher education certified (or only a few steps away from it). Therefore this is an essential limitation of our results, plus we have to distinguish those, who were already in the labor market at the start of their higher education studies. Considering all of the elements the following categories will be tested:

- age distinction of those equal or under 30 years and those above,
- gender differences: men and women, and
- position-related discrepancies between managers and non-managers.

By these limitations from the 90,739 respondents, we will focus on 2327 fresh graduates graduated 1, 3, and 5 years before the period of 2011–2014.

Indicators/Regions	CEE	EU non CEE	Non EU Anglo- Saxon	SEAsia	Total
1. Number of respondent HR	508	1559	405	157	2629
managers					
2. Share of respondent female HR managers (%)	79.9	51.7	58.3	52.9	58.2
3. Share of HR staff female-to-male (%)	71/29	66/34	62/38	56/44	65/35

Table 2 Respondents of the survey sample and gender rates of HR staff, Cranet 2014/16

Source: Authors

## 3.1 Empirical Results of Cranet 2014/16

Although the share of the female HR director respondents in the total sample is female dominated (58.2%), but based on the HR feminization rates the regions of the Cranet members' world seems to be divided into two groups: CEE and the rest of the investigated geographical areas. The highest ratio of the respondent female HR managers is reached in the CEE (79.9%) as well as the highest female-male ratio (71:29) is detected in the same region. The second in rank of the share of female HR director is the non EU Anglo Saxon region (58.3%), while the ratio of the other two regions is almost the same and is around 50–50%. This means that HR managers are women dominated (or equal participation with men) in every examined region. The women prevalence in the total HR staff is unquestionable; with more or less dissolution of difference among the 4 investigated regions. The extremely high (82%) women ratio in CEE dropped to 71, while the other regions maintained their positions of 2008/10 (Table 2).

The difference between CEE and the rest of the regions gives us the opportunity to *control* the basic question of our paper regarding the *relationship between HR feminization and HR status loss*. We test it by looking at the strategic integration level's distribution and average degrees differences in the four regions; also we examine the gender effect.

Based on the figures of Table 3 we can state, that the overall integration level of HR in the total sample is very high, as well as the indicator of the mutual integration of the majority of the respondents is around 80% (in average: 78.5%). This is a drastic rise from 2008/10 when "only" 59.0% were considered as strongly integrated. The majority of the region—except CEE—shows up almost the same proportions as the total sample with no significant difference. Contemporaneously CEE is an outlier in terms that it can be characterized by the highest ratio of medium and weak integration. The results are seemingly in line with the devolution theory, indicating that the highest the level of the female (HR) professionals and leaders—as it is seen in CEE—, the lower the rate of their significance, influence in the organization, the strategic integration (of HR) with the business. At the same time by the results shown in Table 3 the statement formed above seems to be questionable also.

 Table 3 Distribution of HR integration levels in four regions of the world, Cranet 2014/16

	)	,								
	Respondent HR managers	HR manag	çers							
	CEE		EU non CEE	-	Non EU Anglo-Saxon	Saxon	SEAsia		Total	
The level of HR integration	Number	%	er	%	Number	%	Number	%	Number	%
Strong	349	68.7	1245	6.62	341	84.2	128	81.5	2063	78.5
Medium	94	18.6	186	11.9	42	10.4	21	13.4	343	13.0
Weak	65	12.8	128	8.2	22	5.4	8	5.1	223	8.5
Total	508	100	1559	100	405	100	157	100	2629	100

HR manager	CEE	EU nonCEE	Non EU Anglo-Saxon	SEAsia	Total
Female	2.57	2.72	2.79	2.83	2.70
Male	2.52	2.71	2.79	2.69	2.70
Total	2.56	2.72	2.79	2.76	2.70
Mann-Whitney test (p-value)	0.663	0.957	0.616	0.251	0.571

Table 4 Average level of integration of HR by genders of HR directors, Cranet 2014/16

Source: Authors

From one point the average level of HR integration of the total sample as indicated on Table 4 seems to be gender-neutral. This is the case in two of the investigated four regions, namely both in EU nonce and non EU Anglo-Saxon. From the other point of view while in CEE and is SEAsia the average level of integration reached by the female HR managers exceeds the male level. Both of these considerations are in line with the referenced two studies of the literature review, questioning also the validity of the *devaluation theory*. Even if the concept and the indicator of integration in our analyses is different, but until this point the *literature contribution of our hypothesis*—namely the redefined strategic integration parameter helps to dissolve the contradiction between feminization and HR status evolution—*is questionable*.

## 3.2 Empirical Results of GCTS 2011–2015

This stage of our analyses controls the same structure as in Cranet 2014/16, and we can fully comply with the findings in the case of HR professionals (Table 5). HR has the highest level of feminization both in the proportion of women among managers and among every respondent even by the two categories of age. The marketing and finance respondents have almost the same percentage as the average of the total sample considering every factor which refers to a normal distribution of men and women in manager position and the whole staff, too. The higher ratio of female HR managers is even greater among those aged 30 or less. Almost every 9 out of 10 new managers will be women, while in marketing and finance only 6 out of 10. In the case of younger marketing staff, 75% are female, which refers to greater inflow of women into to marketing-related labor-market. Finance in this sense is characterized by the same gender proportions in both of the age categories.

We wanted to test, whether the ratio of men and women among managers is different from the percentage of the staff overall. After a Pearson's Chi-square test we can state that the *female marketing and finance managers are underrepresented* primarily among *the younger groups*, while HR shows no difference. This indicates a future need and increase of women representation, firstly in the case of the marketing profession. Therefore, our assumption: *finance is more male-dominated has not been fully proved*.

Table 5 Manager respondents of the GCTS sample and gender rates of HR, Manager, and Finance staff, 2011-2014

	HR			Marketing			Finance			Total		
Indicators/Professions by age	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	30 <x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<></td></x<></td></x<>	Total	30>=X	30 <x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<></td></x<>	Total	30>=X	30 <x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<>	Total	30>=X	30 <x< td=""><td>Total</td></x<>	Total
1. Number of managers	47	49	96	143	44	187	119	175	294	309	268	577
2. Share of respondent female managers (%)	87.2	75.5	81.3	64.3**	63.6 64.2 63.9*	64.2	63.9*	*9.89	2.99	67.6	0.69	68.3*
3. Share of respondents' female-to-male (%)	87/13	80/20	86/14	75/25	68/32 74/16 73/27	74/16	73/27	75/25 74/16 76/24	74/16		74/26 76/14	76/14

Note: \*The difference is significant at the 5% level of significance and \*\*the difference is significant at the 1% level of significance Source: Authors

Based on the gender distribution in the three chosen professions there is the implication that the feminization in the HR area already took place. Upon the devaluation theory, it is expected that no or minor differences in salary will be seen in HR by gender among both managers and non-managers. The marketing professionals' case is uncertain, we expect a difference in salaries, but for sure among the finance professionals. These presumptions can be tested by the analysis of the monthly net income of the respondents (see Table 6). Statistically significant differences are indicated, confirmed with the statistical tool of One-Way ANOVA (by Levene and Welch test respectively) (Diez et al. 2017).

It can be clearly seen that for marketing, finance and the sample as total there is a significant net income difference between men and women in favor of the former ones without any exceptions. HR professionals do not challenge any discrepancy for the salaries in none of the variable combinations. *Marketing* professionals face wage differences only at the non-managerial level, but not among managers, which indicates that this profession is in the *second-third stage of a feminization* process. Finally, finance profession means the 'stronghold' for men in terms of a big difference in monthly net income, with higher male manager ratio. In total, our previous assumptions were proved using the GCTS databases 2011–2014. *HR profession seems fully feminized, marketing on its way, but finance succeeds to preserve still its positive characteristics for men.* These implications can *support the validation of devaluation theory* but only with *severe limitations*.

### 4 Conclusion

Only the GCTS database provides relevant findings of the queuing and devaluation theory, and even GCTS works with a lot of severe limitations for a relatively narrow sample (fresh graduates in Hungary). The Cranet Survey of 2014/16 from one point seemingly shows strong move forward the support of the devaluation theory regarding female managers' proportion in CEE region, but from another point of view it is questionable and also is without any statistical proof for greater male strategic integration in the other regions.

In our analyses, the female managers, in general, do not face less strategic integration, even if there are differences among their proportions within the four regions. This also means that the effect of glass ceiling voiced by researchers unchangeable on long-term resulted being breakable in a relatively short period of 6 years. GCTS and the Integration of Administrative Databases can provide quantitative evidence for the changes in dynamics not only in the area of HR but other professions, too. GCTS offered a little add-on to this great picture, but significant findings, and implications for the future in the field of HR, marketing, and finance. We can conclude our study with a positive statement: the glass ceiling seems to break in the HR, and based on the GCTS data, sticky floors no more characterize the gender differences in earnings.

Table 6 Monthly net income of GCTS respondents by position, gender and age for HR, Manager and Finance professions, 2011–2014, in thousand HUF

	•		)	)		)		-		`		
Monthly net income by position, gender/	HR			Marketing			Finance			Total		
Professions by age	30>=X	30 <x< td=""><td>Total</td><td>30&gt;=X 30<x< td=""><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<></td></x<></td></x<></td></x<>	Total	30>=X 30 <x< td=""><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<></td></x<></td></x<>	30 <x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<></td></x<>	Total	30>=X	30 <x< td=""><td>Total</td><td>30&gt;=X</td><td>30<x< td=""><td>Total</td></x<></td></x<>	Total	30>=X	30 <x< td=""><td>Total</td></x<>	Total
Managers, female	266	285	275	215	320	240	237	216**	224**	233	246**	239**
Managers, male	270	332	311	250	373	280	246	329**	293**	250	338**	**067
Non managers, female	201	228	205	180**	194*	182	180**	178**	179**	185**	186**	185**
Non managers, male	189	254	201	247**	258*	249	213**	219**	215**	217**	228**	220**
Total, female	211	254	220	190**	249	200**	186**	190**	188**	193**	208**	197**
Total, male	201	301	234	249**	319	264**	219**	267**	236**	226**	280**	243**

Note: \*The difference is significant at the 5% level of significance and \*\*the difference is significant at the 1% level of significance Source: Authors

In total, our previous assumptions were proved using the GCTS databases 2011–2014. HR profession seems fully feminized, marketing on its way, but finance succeeds to preserve still its positive characteristics for men. These implications can support the validation of devaluation theory but with severe limitations.

We suggest exploring new ways of thinking because the validity of queuing and devaluation theories were questioned several times (and not only in the field of HR):

- Heilman's (2001) approach states that the differences by gender are caused by the
  willingness of compliance with the position-related stereotype. This can justify
  stereotype, that women are not suitable for managerial occupations and interpret
  the role of demographic power of group and higher ratio female HR manager in
  CEE region which can hardly lead to the breaking of the glass ceiling,
- According to Pichler et al. (2008), the practice of strategic HR and the gender of HR managers do not show a significant relationship, which fully rejects the popular belief, according to which the feminization of HR and HR strategic integration would be in an opposing connection. It rather states that HR as part of the top management would be stereotyped as male and not as a female job; due to this women will face the unbreakable glass ceiling.
- According to the literature about self-selection theory, women are less likely to ask for promotions and bargain for pay rises (Kee 2006). This approach could support either the existence of the glass ceiling, either the sticky floor.

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### References

- Baron, J. N., & Bielby, W. T. (1985). Organizational barriers to gender equality: Sex segregation of jobs and opportunities. In A. Rossi (Ed.), *Gender and the life course* (pp. 233–251). New York: Aldine
- Beer, M., Spector, B., Lawrence, P., Mills, D. Q., & Walton, R. (1984). *Managing human assets*. New York: Free Press.
- Brewster, C., Wood, G., Brooks, M., & Van Ommeren, J. V. (2006). What determines the size of the HR function? A cross-national analysis. *Human Resource Management*, 45(1), 3–21.
- Diez, D. M., Barr, C. D., & Cetinkaya-Rundel, M. (2017). *OpenIntro statistics* (3rd ed.). OpenIntro. Retrieved 04 March 2018.
- Ehrenberg, R. G., & Smith, R. (2003). Korszerű munkagazdaságtan. Elmélet és közpolitika (Modern labour economics. Theory and public policy). Budapest: Panem Könyvkiadó.
- Fernandez, R. M., & Mors, M. L. (2008). Competing for jobs: Labor queues and gender sorting in the hiring process. *Social Science Research*, 37(4), 1061–1080.
- Gomez-Mejia, L. R., Balkin, D. B., & Cardy, R. L. (2004). Managing human resources. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Goodman, J., Fields, D., & Bulum, T. (2003). Cracks in the glass ceiling: In what kinds of organizations do women make it to the top? *Group and Organization Management*, 28, 475–501.
- Hardin, E. (1991). The integration of women into professional personnel and labour relations work. *Industrial and Labor Relations Review*, 44(2), 401–423.

- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–674.
- Karoliny, M., Bálint, B., & Galambosné Tiszberger, M. (2015). Contradicting gender-effects on strategic role of HRM in four regions of the world. Strategic Management: International Journal of Strategic Management and Decision Support System in Strategic Management, 20 (3), 25–36.
- Kee, H. J. (2006). Glass ceiling or sticky floor? Exploring the Australian gender pay gap. Economic Record, 82, 408–427.
- Lazarova, M., Mayrhofer, W., & Brewster, C. (2013). 'Plus ca change, plus c'est la meme chose': A longitudinal analysis of HRM work and the profile of senior HR managers. In E. Parry, E. Stavrou, & M. Lazarova (Eds.), Global trends in human resource management (pp. 11–34). London: Palgrave-Macmillan.
- Murphy, R. (1988). Social closure: The theory of monopolization and exclusion. Oxford: Clarendon Press.
- Perales, F. (2010). Occupational feminization, specialized human capital and wages: Evidence from the British Labour Market. ISER working paper series. University of Essex: Institute for Social and Economic Research.
- Pfeffer, J., & Davis-Blake, A. (1987). The effect of the proportion of women on salaries: The case of college administrators. *Administrative Science Quarterly*, 32, 1–27.
- Pichler, S., Simpson, P. A., & Stroh, L. K. (2008). The glass ceiling in human resources: Exploring the link between women's representation in management and the practices of strategic human resource management and employee involvement. *Human Resource Management*, 47(3), 463–479.
- Reichel, A., Brandl, J., & Mayrhofer, W. (2013). New captain but a sinking ship? The influence of HR director's gender on the status of the HR department A longitudinal study. In E. Parry, E. Stavrou, & M. Lazarova (Eds.), *Global trends in human resource management* (pp. 33–53). London: Palgrave-Macmillan.
- Reskin, B. (1993). Sex segregation in the workplace. Annual Review of Sociology, 19, 241–271.
- Reskin, B., & Roos, P. (1990). *Job queues, gender queues. Explaining women's inroads into male occupations*. Philadelphia, PA: Temple University Press.
- Roos, P. A., & Manley, J. E. (1996). Staffing personnel: Feminization and change in human resource management. *Sociological Focus*, 39(3), 246–261.
- Schuler, R., & Jackson, S. (2007). Strategic human resource management. London: Blackwells.
- Steinberg, R. J. (2001). Comparable worth in gender studies. In *International encyclopaedia of the social and behavioral sciences* (Vol. 4, pp. 2393–2397). London: Elsevier.
- Truss, C., Gratton, L., Hope-Hailey, V., Stiles, P., & Zaleska, J. (2002). Paying the piper: Choice and constrains in changing HR functional roles. *Human Resource Management Journal*, 12(2), 39–63.
- Ulrich, D., Brockbank, W., Younger, J., Nyman, M., & Allen, J. (2009). *HR transformation: Building human resources from the outside in*. New York: McGraw Hill Professional.

# Impact on Salespersons' Success Through Transformational Leadership



#### Matthias Diinnweber and Carmen Păunescu

**Abstract** The paper analyses how strongly the combination of transactional and transformational leadership improves the performance of German salespersons in comparison to a straight transactional leadership style. Most sales executives use a straight transactional leadership style to manage their sales force. Although the impact of sales forces' success through transactional leadership has been researched very well, recent research has only very limited analyzed the impact of the combination of both leadership styles exclusively on the success of salespersons in Germany. This paper will provide the current state of knowledge concerning transformational leadership in sales and its impact on followers' performance. Additionally, different samples of sales executives and sales agents have been interviewed about the applied leadership style and their opinion about the performance of their sales force. The questionnaire includes questions from the MLO-Form 5X to identify the leadership style and questions about the sales executives' and sales agents' individual opinion about the success of their team. The results of the quantitative research are discussed in corroboration with the findings from the literature. The results of this paper show that the application of a transformational leadership style in sales has a positive effect on the success of salespersons. According to the results of the interviewed sales executives and agents the application of transformational leadership techniques has an even greater effect on the performance of salespersons than what is commonly observed in studies without a specific focus on sales. In some cases the effect that we measured was quite massive.

**Keywords** Transformational leadership · Transactional leadership · Leadership in sales · Idealized influence · Inspirational motivation · Intellectual stimulation · Individualized consideration

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# 1 Introduction

Over the last two decades, studies on transformational and transactional leadership in different organizational settings have gone through significant changes and evolutions in terms of concept development as well as empirical investigations. As a result, our knowledge about the leadership styles and models have evolved, and there are several dominant theories and instruments that are now established in the leadership field. Despite the development there is still a number of leadership forms for various field that need further research and discussion.

Leaders play the primary role in establishing and motivating employees' performance, which in sales is essential. Sales managers are the persons most responsible for influencing the perceptions and behaviors of their sales force as such their leadership style is essential in motivating their people (Smith et al. 2012). Transformational leadership has been regarded as behaviors, approaches and methods used by leaders to transform and inspire their followers to perform beyond expectations for the good of their organization, going beyond their self-interests (Avolio et al. 2009). However, little research has examined how the transformational leadership in sales results in high-performance workforce exceeding organizational expectations.

The paper is an attempt to distinguish between transactional and transformational leadership in sales. More precisely, it discusses the advantages and disadvantages of transformational leadership in sales based on recent researches and their impact on followers' performance. By using an adapted version of MLQ-Form 5X tool for sales executives and their team, the paper analyzes the most dominant leadership style for executives and agents in sales. The paper starts with a review of transformational leadership in sales, by explaining the advantages and disadvantages of this leadership style in sales. Then it describes the methodology used to assess the type of leadership. Finally, lessons are drawn for sales executives based on results regarding applying transformational leadership in their leadership style.

# 2 Transformational Leadership in Sales

Researches on transformational leadership in any organizational settings has gone through a significant evolution in terms of theory development as well as empirical investigations (Choudhary et al. 2013; Stevens 2011; Traml et al. 2015; Yi-Feng 2014). Prior leadership research had concentrated on identifying and measuring behaviors and attitudes that fell into all ranges of leadership styles, namely, transactional, passive-avoidant (laissez-faire) and transformational (MacKenzie et al. 2001).

Transactional leadership has been defined, in its passive form, as leader behaviors that involve waiting for mistakes to occur before taking action and applying corrective actions lately. In its active form, behaviors that involve a close monitoring, actively setting standards and applying contingent rewards. Passive-avoidant

leadership is regarded as leader behaviors that avoid involvement. It is passive, avoidant and ineffective. On the reverse side, transformational leadership has been defined as leader behaviors that transform and inspire followers to perform beyond expectations while transcending self-interest for the good of the organization that they are being employed by (Avolio et al. 2009). Transformational leadership encompasses much more than rewarding for efforts made to change behaviors and adopt a preventive orientation. Transformational leadership is inspirational, intellectually stimulating, challenging, visionary, development oriented (Stevens 2011). It is regarded as the most active and effective form of leadership.

In an organization, leaders play the primary role in establishing and motivating employees' performance. Creating high-performance workforce has become increasingly vital for companies. In this respect, business leaders must be able to motivate organizational members to go beyond their task requirements and targets settled for them. Transformational leaders do so by stimulating intellectual curiosity, initiative and achievement. Additionally, transformational leaders empower team members to develop their own leadership skills by paying attention to individual needs for development and growth (Traml et al. 2015).

Although the impact of companies' success through transformational leadership in comparison to transactional leadership has been researched very well over the last decades (MacKenzie et al. 2001), recent research has only very limited analyzed the impact of transformational leadership exclusively on the success of salespersons. Most sales executives use a transactional leadership style to manage their sales force as the components of a transactional leadership are easier to apply on a sales strategy (e.g. commission or management by objective). Transformational leadership influences behaviors associated with leadership effectiveness in driving change and transforming organization to success (Traml et al. 2015).

# 3 Methodology

The Multifactor Leadership Questionnaire (MLQ), also known as MLQ-5X, is a standard tool used to measure a broad range of leadership types and styles in different organization settings. This extends from passive or laissez-faire leaders, to leaders who give contingent rewards to their followers, and further to leaders who transform their followers into becoming leaders themselves (Avolio and Bass 2004; Bass and Avolio 1990). The MLQ helps an individual to self-assess himself in their own eyes and in the eyes of his co-workers, by identifying the characteristics of a transformational or transactional leader or non-leadership skills.

Over the last three decades the MLQ-5X has been developed, evolved and validated by various scholars and in a number of settings (Avolio and Bass 2004). The effectiveness of transformational leadership has been proven for various fields and in many countries around the world (Judge and Piccolo 2004). However, the application of transformational leadership in German-speaking countries had been limited in a number of ways. As such, for the purpose of this paper we use a German-

Leadership outcomes	MLQ 5X items
Extra-effort	I get my salesforce to sell more than they expected to sell I heighten my salesforce' desire to convert prospects into customers I increase my salesforce' willingness to try harder to get new customers/news deals with existing customers
Effectiveness	I am effective in getting new customers or converting prospects into customers I am effective in getting new deals from existing clients I am effective in getting new sales targets and meeting organizational objectives I am effective in getting contract extensions from existing clients
Satisfaction	I use leadership methods that are satisfying for my salesforce to achieve the sales targets I work with my salesforce to get new customers/new deals in a satisfactory way

Table 1 MLQ 5 X items to measure leadership outcomes in sales

translation version of the MLQ-5X that was applied to a number of sales executives and sales agents in German companies. The data was collected in the period 10th of December 2016 to 24th of December 2016 by using a Survey Monkey posted questionnaire. A number of 36 valid answers have been collected, which are further interpreted in the paper.

The paper provides empirical evidence regarding transformational leadership in sales. The MLQ includes 45 questions, covering the "full range" leadership model, from transactional leadership, passive-avoidant leadership, non-leadership scales and up to transformational leadership. The current research is developed to expand the dimensions of leadership measured by previous leadership surveys and to provide a concise results for sales. To assess the leadership outcomes which are relevant for sales. Nine items of the standard questionnaire have been adapted, to better reflect the leadership performance in sales. These questions are listed in Table 1.

The quantitative research aims to identify positive correlations between the five categories of the MLQ-5X that are related to transformational leadership and the outcomes focused on sales. Additionally, in the paper we also compare our findings for sales executives with one of the MLQ international normative samples published by Avolio and Bass (2004) that covers the findings for cross-functional executives in Europe. The MLQ-5X identifies in addition to transformational leadership also other leadership behaviors (Avolio and Bass 2004).

In the following paragraph you will find a brief description about these points. Additionally, we added our hypotheses below the descriptions of the five transformational leadership categories. All 45 questions in MLQ-5X can be attributed to one of the following four principal leadership categories: transformational leadership, transactional leadership, laissez-faire or outcome. The objective of MLQ-5X is to determine the value of these four principle categories for a test person or—as in this case—a test group. MLQ-5X also permits the four principle categories to be broken

down into subcategories that can also be individually evaluated (Avolio and Bass 2004).

According to Bass and Avolio (1990), the questions relating to transformational leadership, the first of the principal categories can be attributed to one of the "4 I's" (Bass and Avolio 1990). The "4 I's" are subsequently briefly elucidated, in order to make the evaluation easier to understand.

• Idealized influence: The demeanor and actions of an executive are perceived as exemplary by employees (Bass and Avolio 1990; Bass 1997). In MLQ-5X, Idealized Influence is further subcategorized into behavior and attributed (Avolio and Bass 2004). Building on this theory, we make the following assumptions:

H1a: Idealized influence attributed correlates positively with extra effort in sales. H1b: Idealized influence attributed correlates positively with effectiveness in sales.

H1c: Idealized influence attributed correlates positively with satisfaction in sales.

H2a: Idealized influence behavior correlates positively with extra effort in sales. H2b: Idealized influence behavior correlates positively with effectiveness in sales.

H2c: Idealized influence behavior correlates positively with satisfaction in sales.

• Inspirational motivation: A manager can convey the significance of necessary tasks so well to employees that they become intrinsically motivated and are committed to accomplishing these tasks (Bass and Avolio 1990; Bass 1997). Building on this theory, we assume that:

H3a: Inspirational motivation correlates positively with extra effort in sales. H3b: Inspirational motivation correlates positively with effectiveness in sales. H3c: Inspirational motivation correlates positively with satisfaction in sales.

Intellectual stimulation: Employees are encouraged to think independently, creatively and innovatively by a manager, in order to question and optimize the current situation (Bass and Avolio 1990; Bass 1997). Building on this theory, we hypothesize:

H4a: Intellectual stimulation correlates positively with extra effort in sales. H4b: Intellectual stimulation correlates positively with effectiveness in sales.

H4c: Intellectual stimulation correlates positively with satisfaction in sales.

 Individualized consideration: A manager supports his employees by developing their strengths and minimizing their weaknesses, while bearing in mind the targets of individual employees (Bass and Avolio 1990; Bass 1997). Building on this theory, we hypothesize:

H5a: Individualized consideration correlates positively with extra effort in sales. H5b: Individualized consideration correlates positively with effectiveness in sales.

H5c: Individualized consideration correlates positively with satisfaction in sales.

Transactional leadership—the second principle category—describes a style of management in which a mutual exchange relationship is developed between a manager and employees (Burns 1978). Bass (1985) divided this management style into contingent reward and management by exception (Bass 1985). These behavior patterns are also taken into account when evaluating this management style in MLQ-5X, where Management by Exception is subdivided into active and passive (Avolio and Bass 2004).

- Contingent reward: When employees successfully complete tasks assigned by a manager, they are rewarded by the manager. The manager makes the nature of these rewards clear to employees in advance. The tasks themselves are explained to employees in detail by the manager (Burns 1978).
- Management by exception—active: A manager puts strong emphasis on close adherence to rules and working procedure, in order to avoid potential employee errors before it is possible for them to occur (Bass 1985; Burns 1978).
- Management by exception—passive: When this style of management is adopted, the manager only takes action when errors have already occurred or standard performance levels have not been achieved. As long as operating procedure is carried out without any errors, the manager pays no attention and remains passive (Burns 1978; Bass 1985).

The third principle category that is called laissez-faire is not divided into subcategories in MLQ-5X (Avolio and Bass 2004).

Laissez-faire: The questions pertaining to this category evaluate a manager's lack
of leadership behavior. The higher this score is, the less difference it makes to
employees whether the manager is present or absent. The employees feel neither
controlled nor inspired by their superiors (Avolio and Bass 2004; Jones and Rudd
2007). Managers who avoid making decisions exhibit behavior that is very
typical for this category (Bass 2000).

The final principle category of MLQ-5X relates to the outcome created by a manager and his/her behavior. The first three principle categories thus define the management style, while outcomes serve to evaluate the impact of the applied leadership style. In MLQ-5X, outcomes are divided into extra effort, effectiveness and satisfaction (Avolio and Bass 2004).

As explained above, we have adjusted these outcomes to suit the area of sales. Although our approach evaluates new and thus unexplored effects of management behavior, it nevertheless allows us to quantify the impact of leadership behavior by means of tried and tested methods, and to compare the results of our group with those of another group that has also been tested by means of MLQ-5X.

In order to allow us to compare correlations of leadership style and impact on sales with the results of a cross-functional study group, we adopted Mind Garden's normative sample for Europe. This control group includes data from a study in which 1143 managers evaluated themselves and 3061 employees evaluated their superiors and the related outcomes (Avolio and Bass 2004).

To determine the correlations, we first evaluated each questionnaire individually, allowing us to perform a correct evaluation of each anonymous person on the basis of the aforementioned behavior patterns and related effects. We applied the official scoring key supplied by Mind Garden. We used Excel to perform the required calculations and SPSS to determine the correlations.

## 4 Results and Discussion

The data that we collected—36 valid answers—allows the following demographic values to be determined. The respondents come from different sectors of activity as follows: services (22.2%), other industries (11.1%), business services (11.1%), other commercial ventures (8.3%), finance, real estate and insurance (8.3%), furnishings (5.6%), textiles (5.6%), transportation (5.6%), clothing and accessories (5.6%), social and medical services and pharmaceutical industry (5.6%), agriculture (2.8%), associations and leisure activities (2.8%), construction (2.8%) and food (2.8%).

All of the participants are working in sales, out of which 20 participants are executives who answered the questions with their self-evaluation and 16 participants are agents without managerial responsibility who evaluated their executives. Seventy-five percent of the executives are male and 25% are female, whereas 50% of the agents are male and 50% are female.

In what regards education, 10% of the executives have a doctoral degree or equivalent, 55% stated to hold a master degree or equivalent and 25% have only a bachelor degree or equivalent. Only 5% of those interviewed have only a high school diploma or equivalent or any other degree (5%). Also, the majority of the agents have a bachelor degree or equivalent (31.3%). Twenty-five percent of the interviewed agents stated to have a master degree or equivalent. The same number of the agents indicated to have a high school diploma or equivalent. The remaining 18.8% stated to have any other degree.

The executives that participated in our survey have more work experience than the agents: 1–3 years (executives: 12.5%; agents: 15%), 3–6 years (executives: 20%; agents: 43.8%), 6–10 years (executives: 10%; agents: 25%) and >10 years (executives: 55%; agents: 18.8%). Before we get to the evaluations of the correlations, we would like to take a brief look at the average values reported by the sales executives that we surveyed and their self-assessments (Table 2). We will then compare these findings with the normative sample of Avolio and Bass (2004).

Aside from the mean values, which reflect a rather more cautious leadership style (management by exception—passive and laissez-faire), the normative sample, which is based on the self-evaluations of executives in Europe, shows only very small and insignificant deviations from the results of our survey (Avolio and Bass 2004). The sales executives that we interviewed believe that they practice a leadership style that is more than one third passive. It is also worth mentioning the approximate 25%

Scale	Mean	Standard deviation	Range
Idealized influence (attributed)	2.59	0.88	3.50
Idealized influence (behavior)	2.41	1.05	3.50
Inspirational motivation	2.86	0.98	3.25
Intellectual stimulation	2.80	0.71	2.25
Individualized consideration	2.64	1.00	4.0
Contingent reward	2.81	0.68	2.50
Management by exception—active	1.84	1.06	3.50
Management by exception—passive	1.43	0.96	3.25
Laissez-faire	1.05	1.00	3.75
Extra effort (sales)	2.57	1.03	3.33
Effectiveness (sales)	2.64	1.04	3.25
Satisfaction (sales)	2.53	1.18	3.50

Table 2 Self-evaluation by sales executives

Note: N = 20

**Table 3** Evaluation by sales agents (lower level)

Scale	Mean	SD	Range
Idealized influence (attributed)	2.31	0.77	3.25
Idealized influence (behavior)	2.38	0.66	2.25
Inspirational motivation	2.55	0.88	3.25
Intellectual stimulation	2.69	0.62	2.00
Individualized consideration	2.55	0.71	2.75
Contingent reward	2.61	0.70	2.75
Management by exception—active	2.06	0.83	3.00
Management by exception—passive	1.69	1.15	3.25
Laissez-faire	1.61	1.14	3.25
Extra effort (sales)	2.13	1.15	3.67
Effectiveness (sales)	2.50	1.07	3.75
Satisfaction (sales)	1.69	1.05	3.00

Note: N = 16

deviation with respect to idealized influence (behavior). Sales executives to a lesser extent lead their employees by the example of their behavior.

Our survey of sales agents yielded a similar result (Table 3). The sales agents rated their superiors and assessed their extra effort, effectiveness and satisfaction in sales. We compared the resulting averages with the normative sample, which is based on how the employees evaluated their executives in Europe (Avolio and Bass 2004). Again, we found that the mean values, which indicate a rather more cautious leadership style (35% reported making recourse to management by exception—passive, and 51% reported a laissez-faire style), differed markedly from the comparison group. Furthermore, we found that satisfaction in sales with -74% was rated significantly lower than in the cross-functional comparison group. The remaining averages have very small deviations.

**Table 4** Intercorrelations among MLQ factor scores (self-evaluation by sales executives)

	II(a)	II(b)	IM	IS	IC
EE (sales)	0.74**	0.77**	0.55	0.72**	0.35
EFF (sales)	0.67**	0.52*	0.37	0.68**	0.14
SAT (sales)	0.67**	0.70**	0.53*	0.70**	0.41

Note: N = 20/\*p < 0.05; \*\* p < 0.01

Thus, we have established the extent of the impact that the five characteristics of transformational leadership—Idealized influence (attributed) = II(a), Idealized influence (behavior) = II(b), Inspirational motivation = IM, Intellectual stimulation = IM, Individualized consideration = IM =

All five characteristics of transformational leadership have a positive correlation with all three sales outcomes. At first this did not seem surprising, because in our normative sample the five characteristics of transformational leadership had a positive correlation with all three outcomes, as well. On closer inspection, however, we discovered an interesting and important difference between the correlations in sales and the cross-functional comparison group: the five characteristics of transformational leadership influenced the outcomes in sales to a different extent than in the general comparison group.

These findings should be considered by sales executives, if they would like to improve certain outcomes of their sales force in particular by adapting their transformational leadership style. According to the results of the cross-functional correlation analysis, the two characteristics of idealized influence (attributed) as well as inspirational motivation had the greatest impact on the extra effort outcome with positive correlations of 0.54 and 0.55, respectively (Avolio and Bass 2004). Even when our correlation analysis showed the same correlation value (0.55) for inspirational motivation and extra effort in sales, the correlation matrix showed that this is only the fourth most powerful factor influencing sales. With 0.77, idealized influence (behavior) had the strongest impact on extra effort in sales. This correlation is followed closely by idealized influence (attributed) (0.74) and intellectual stimulation (0.72).

In addition, when we measure correlations with effectiveness, the cross-functional correlation analysis has made it apparent that idealized influence (attributed) (with a positive correlation of 0.51) and inspirational motivation (with a correlation of 0.49) had the strongest influence on this outcome (Avolio and Bass 2004). According to the results of our survey of sales executives, we found intellectual stimulation (0.68) had the strongest correlation with effectiveness in sales. Idealized influence (attributed) has the second highest correlation value for sales executives with 0.67. According to the findings, inspirational motivation and individualized consideration have a weaker impact on effectiveness in sales than in the cross-functional peer group. At this point, however, we would like to point out that

the level of significance for these correlations is 0.11 for inspirational motivation and 0.56 for individualized consideration.

The satisfaction outcome is usually most strongly correlated with idealized influence (attributed) and inspirational motivation. The correlational coefficient for both characteristics is 0.49 (Avolio and Bass 2004). For sales executives, we observed that the characteristics idealized influence (behavior) and intellectual stimulation have the two strongest correlations with satisfaction in sales. They each had a value of 0.70. The values of the correlation of idealized influence (attributed) and inspirational motivation with satisfaction in sales were much smaller than the other two characteristics as measured by the magnitude of their effect. However, the correlation values themselves (0.67 and 0.53) were higher than the ones observed for the cross-functional executives.

When we consider more carefully the overall picture of the correlation analyses, which are based on the self-assessments of the sales executives, then it can clearly be seen that all of the characteristics that are related to transformational leadership that have a significance level of p < 0.01 have a stronger correlation with outcomes in sales than they do with the cross-functional executives. This means that the use of the transformational leadership style has become more effective for increasing sales than it was in the past.

The second correlation analysis is based on a survey of sales agents and their assessments of their superiors. The analysis yielded the following correlation values (Table 5).

The correlation matrix that is based on surveys of sales agents shows that all five characteristics of transformational leadership also have a positive correlation with all three outcomes in sales, which is also true for the cross-functional comparison group. According to the cross-functional comparison group, idealized influence (attributed) has the strongest influence on all three outcomes: extra effort (0.68), effectiveness (0.70), and satisfaction (0.73). All correlation values that are related to these factors are greater than 0.50 (Avolio and Bass 2004). From this it can easily be seen that a transformational leadership style not only has a positive effect on outcomes: it has a tremendously positive effect.

Based on the data provided by sales agents, we have shown that for the values that have a significance level of p < 0.01 transformational leadership has a similar strong influence on outcomes in sales. Idealized influence (behavior) with a correlation coefficient of 0.71 closely followed by idealized influence (attributed) with a value of 0.65 have the strongest impact on extra effort in sales. Effectiveness in sales correlates most strongly with the following three characteristics: inspirational motivation (0.82), idealized influence (behavior) (0.79), and idealized influence

**Table 5** Intercorrelations among MLQ factor scores (evaluation by sales agents—lower level)

	II(a)	II(b)	IM	IS	IC
EE (sales)	0.65**	0.71**	0.52*	0.36	0.28
EFF (sales)	0.66**	0.79**	0.82**	0.54	0.49
SAT (sales)	0.54*	0.54*	0.36	0.33	0.21

Note: N = 16/\*p < 0.05; \*\*p < 0.01

H<sub>5</sub>b

Н5с

(Proved)

(Proved)

	Sales executives	Sales agents
Hla	Proved**	Proved**
H1b	Proved**	Proved**
H1c	Proved**	Proved*
H2a	Proved**	Proved**
H2b	Proved*	Proved**
H2c	Proved**	Proved*
НЗа	Proved*	Proved*
H3b	(Proved)	Proved**
Н3с	Proved*	(Proved)
H4a	Proved**	(Proved)
H4b	Proved**	Proved*
Н4с	Proved**	(Proved)
H5a	(Proved)	(Proved)

**Table 6** Overview of the hypotheses

Note: p < 0.05; p < 0.01

(Proved)

(Proved)

(attributed) (0.66). The highest correlation values with respect to satisfaction in sales were achieved by idealized influence (attributed) and idealized influence (behavior), which each had 0.54. Here it should be noted that the level of significance for this two correlation values was p < 0.05.

Our research results are consistent with other existing researches done in the field that are based on data from other countries. Thus, Shannahan et al. (2013) proved that the sales performance is highest when salespeople are under transformational leadership (Shannahan et al. 2013). Also, Schwepker and Good (2010) demonstrated that transformational leadership has direct effects on the trust of the salesperson in the manager and his/her overall performance (Schwepker and Good 2010). Based on all these interpretations of the correlation values that relate to our hypotheses from the perspectives of both sales executives as well as sales agents, we conclude that all of the hypotheses stated initially have been proved (Table 6).

### 5 Conclusion

The paper brings new insights in the better understanding of the preferences, attitudes, and behaviors characteristics for sales executives and agents in key dimensions of his/her leadership style. Our research results prove that the application of a transformational leadership style has a positive effect on the performance of the sales force. According to the self-assessments of sales executives, the application of transformational leadership techniques has an even greater effect on the performance of the sales force than what is commonly observed in other areas. The rating results provided by sales agents showed that transformational leadership techniques had a

comparatively strong effect on the sales force. In some cases the effect was quite massive. We would recommend on the basis of the results of this paper that sales executives should incorporate transformational leadership techniques into their current leadership style, since these will allow for improving the performance of their sales force.

# References

- Avolio, B. J., & Bass, B. M. (2004). *Multifactor leadership questionnaire: Manual and sample set* (3rd ed.). Redwood City: Mind Garden.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421–449.
- Bass, B. M. (1985). Leadership and beyond expectations. New York: Free Press.
- Bass, B. M. (1997). Personal selling and transactional/transformational leadership. The Journal of Personal Selling and Sales Management, 17(3), 19–28.
- Bass, B. M. (2000). The future of leadership in learning organizations. *Journal of Leadership Studies*, 7(3), 18–40.
- Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14(5), 21–27.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Choudhary, A. I., Akhtar, S. A., & Zaheer, A. (2013). Impact of transformational and servant leadership on organizational performance: A comparative analysis. *Journal of Business Ethics*, *116*, 433–440.
- Jones, D. W., & Rudd, R. D. (2007). Transactional, transformational and laissez-faire leadership: An assessment of college of agriculture academic program leaders (deans) leadership styles. In Proceedings of the 2007 AAAE Research Conference (Vol. 34, pp. 520–530).
- Judge, A. J., & Piccolo, R. F. (2004). Transformational and transactional leadership: A metaanalytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768.
- MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115–134.
- Schwepker, C. H., Jr., & Good, D. J. (2010). Transformational leadership and its impact on sales force moral judgment. *Journal of Personal Selling & Sales Management*, 30(4), 299–317.
- Shannahan, K. L. J., Bush, A. J., & Shannahan, R. J. (2013). Are your salespeople coachable? How salesperson coachability, trait competitiveness, and transformational leadership enhance sales performance. *Journal of the Academy of Marketing Science*, 41, 40–54.
- Smith, B., Andras, T. R., & Rosembloom, B. R. (2012). Transformational leadership. Managing the twenty-first century sales force. *Psychology and Marketing*, 29(6), 434–444.
- Stevens, C. W. (2011). Using transformational leadership to guide an organization's success. *Wiley Periodicals, Inc.*, [e-journal], 37(4), 37–44.
- Traml, S. A., Bustamam, U. S. A., & Mohamed, Z. A. (2015). The effect of transformational leadership in achieving high performance workforce that exceeds organisational expectation: A study from a global and Islamic perspective. Global Business and Management Research: An International Journal, 7(2), 88–94.
- Yi-Feng, Y. (2014). Studies of transformational leadership: Evaluating two alternative models of trust and satisfaction. *Psychological Reports: Employment Psychology & Marketing*, 114(3), 740–757.

# Improvement of the Quality of Life in the University "Politehnica" of Bucharest Campus: A Problem Detection Study Approach



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Abstract Based on the idea that the quality of campus spaces influences the quality of the educational and research processes within it, we have conducted a study in order to assess the students' and professors' perception on the quality of life in the campus of University POLITEHNICA of Bucharest (UPB). The aim of this article is to compute a general index showing the quality of life perceived by professor and students together, to identify the aspects that need improvement the most, and to suggest ideas to make those changes. Our analysis is based on the results obtained from self-administered questionnaires, and also, on a problem detection study (PDS) approach in order to rank the most important problems found. The results show there is a medium level of satisfaction regarding the quality of life in the UPB campus. Room space, urban furniture, recreational options, insufficient promotion of ERAS-MUS programs, and the decision making process are some of the most important aspects that need to change, from the point of view of students and professors. We conclude with our main findings and solutions offered and we present our ideas to further address the issues regarding the quality of life in campus.

**Keywords** University campus · Index · Quality of life · Problem detection study

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# 1 Introduction

Based on the idea that the quality of campus spaces influences the quality of the educational and research processes within it, we have conducted a study in order to assess the students' and professors' perception on the quality of life in the campus of University POLITEHNICA of Bucharest (UPB) (Dumitrescu et al. 2017a, b, c). We have analyzed the answers to questionnaires filled in by students and professors regarding this matter. Based on their answers, most of them given on a Likert scale, we were able to calculate an index, for each category of stakeholders. The result is that the level of satisfaction and thus, the perceived quality of life, is above medium, but there are aspects that need to be improved in order to obtain better results in the future, and to improve the educational and academic results in this university.

As a consequence, this paper has a twofold aim: the first, to estimate a general index for the perceived quality of life, based on both students and professors answers; the second, to rank the most important aspects that need to be improved and, based on a cost/benefit analysis, to determine which of these should be addressed first.

There are not many studies and data available for the public regarding the quality of life in a university campus and how to assess it (Dumitrescu et al. 2017a); our research aims to fill this gap, by suggesting a method to estimate the perceived quality of life in a campus. We applied our method on the University POLITEHNICA of Bucharest campus, but we consider that it can be also applied for other campuses. With this article we go beyond just assessing the current situation, and we identify the most important issues that need to be addressed and the ways to do it.

As a result, we find that in the University POLITEHNICA of Bucharest there is a perceived quality of life above the medium level, and that room space, urban furniture, recreational options, insufficient promotion of ERASMUS programs, and the decision making process are some of the most important aspects that need to be changed.

The second section of this paper presents the most important benefits the Problem Detection Study (PDS) approach brings, and also the different ways to apply it. The next section presents the methods used for the analysis that is presented in this paper. The fourth section presents the main results, and the last one concludes the research, also mentioning further directions for study.

### 2 Literature Review

Problem detection study approach means that decision makers become aware of a problem that customers claim. A problem appears when desires do not meet reality and there is a difference between what they desire and how they perceive the reality. A Chinese saying shows that "in every problem there is an opportunity hiding". For

that reason there is a need to find out what the significant problems are and find out how to solve them in a beneficial manner. Emmerton et al. (2012), Wade et al. (2003), Jallow et al. (2007) show that Problem Detection Study (PDS) method, originated in marketing and advertising research, gained large acceptance in social studies.

This method combines qualitative and quantitative data collection in order to realize a comparison between different perceptual position groups. Researchers like Lunneryd and Öhlmér (2006) consider that problem assessment means becoming aware of the problem by specifying the problem, identifying decision options and choosing options to develop further. The decision makers have to locate the cause of the difference between desired and perceived situation. They need to conduct a serious evaluation of the discrepancies, using their own experience and intuition (Klein et al. 2005); the analysis should be subtle and context-dependent. The PDS approach focuses on the analysis of the problems stated and evaluated by different groups through investigating similarities and differences among them. In other words, PDS approach means reframing a specific situation and this is considered to be very useful for future strategy of inducing the desired change (Emmerton et al. 2012). PDS also reflects an inversed approach from reactive attitudes towards proactive problem finding (Kleindorfer et al. 1993).

As higher education has become an intensely competitive market and that students now take into consideration a wider range of services that universities offer (Bhujan 2016), it is clear that universities must think of new ways to offer valuable services; using modern techniques like PDS can help narrow the gap between the desired and the perceived quality of those services. By focusing on offering a student-oriented and student-centered quality service, universities will attract and retain more students. More than that, providing better services in campus and having a high score in campus ranking is also associated with better graduation rates (Hajrasouliha 2017), which improves the prestige of the university.

# 3 Methodology

In our previous work (Dumitrescu et al. 2017b, c), we have calculated two indexes for the perceived quality of life, for students, and also for professors, based on the answers given to the questionnaires containing Likert type questions, on a scale from 1 to 5. For both questionnaires, we calculated the total score for each question and each category of questions, and then the category score was weighted based on its importance (as respondents see it). Here we determine the general index, taking into account both categories of stakeholders at the same time. We consider that both students and professors are equally important for the university, for its achievements and prestige, we calculated the general index of the perceived quality of life in the University POLITEHNICA of Bucharest as following:

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$$IQoL = 0.5 * I_{QoLP} + 0.50 * I_{QoLS}$$
 (1)

where:

I<sub>OoLP</sub> is the index calculated for professors;

I<sub>Ool S</sub> is the one calculated for students;

As a first step we asked about the degree of satisfaction of what we considered to be the needs of the campus residents. Our purpose was to find out how they perceive a specific topic and to find out other relevant issues we did not take into account. During our research, we obtained results that indicated only medium levels of satisfaction, for both categories of stakeholders, which means there are aspects that needs to be improved in order to increase the perceived quality of life in the university. As a consequence, in this part of the study the aim is to determine those aspects that require improvement the most, in order to have a more truthful image and to be able to identify a solution to efficiently improve QoL Index in the University POLITEHNICA of Bucharest.

In order to apply the PDS approach, we took into consideration the answers given by respondents in both the self-administered questionnaire, and in face-to-face interviews. Then we chose five aspects that received the lowest scores for students, and five aspects that scored lowest from the professors' perspective. For all these low scoring factors, we discuss possible solutions for improvement, and also the costs and benefits of those solutions. We also discussed other aspects of life in campus, aspects that scored rather low but which are considered important for improving the quality of life. The decision is to take into consideration those aspects which received the lowest scores in terms of respondents' perception, to analyze if they are cost—efficient to be tackled and to see if the possible benefits can appear in a short or medium term.

We will be making recommendations regarding the best way of action so that the first results are to be expected as soon as possible in terms of the improvement of the quality of life index. As it was previously mentioned, possible solutions to improve the quality of life in the campus taking into account both costs and benefits for those solutions were considered. It means that the PDS approach is an economic approach based on a cost—benefit analysis.

Decision makers should choose some aspects to improve the perception on the quality of life, and the decision should be taken based on a cost benefit analysis. The improvement in the quality of life index should take into account all the criteria that were included in that index. In this paper, we analyze the cost of improving some aspects: time, the easiness of modifying them, financial issues. In the same time, it is analyzed the benefits of changing some criteria: the improvement of the perception of students and professors, the time horizon they appear. The management of the University POLITEHNICA of Bucharest will decide taking into account net benefits of that decision (the benefits should exceed the costs).

# 4 Results

# 4.1 The General Index of the Quality of Life

As this article continues the research from two previous studies (Dumitrescu et al. 2017b, c) which focused on determining the value of QoL index for students and professors, here we calculated an overall quality of life index that would capture the level of satisfaction of the stakeholders with the life in campus.

As it was considered that the quality of education in a university depends equally on the satisfaction of both students and professors, the degree of satisfaction of both groups should have the same importance (weight) in determining the value of the aggregated index. To strengthen the decision to use equal weights, both the QoL index for students and for professors have very close values, which shows that, even if at a first glance there are countless differences between the two groups, respectively both of them have similar perceptions on the quality of life in campus. The value for the general QoL index is:

$$I_{QoL} = 0.5 * 3.314 + 0.5 * 3.395 = 3.355 \tag{2}$$

The overall QoL index has a value of 3.355 out of a maximum of 5. In order to better understand this score and to find solutions for improving the result in the future we will use a PDS approach in the next section.

# 4.2 PDS Approach

One of the main goals of our study and in particular of this article was to understand what are the most important factors that influence the degree of satisfaction of students and professors regarding the quality of life in campus. One of the directions was to highlight the factors that have low scores in our questionnaires. This helps to understand what the biggest weaknesses of the campus are and find solutions for improving the quality of life.

#### 4.2.1 Professors

According to collected, systematized and indexed data, as summarizing conducted interviews during the PDS approach, the five main issues that negatively influence professors' perception regarding quality of life in the campus are: the urban furniture, the involvement in the decision-making process at the university level, the garbage bins number, recreational options, and the time for waiting in line at the campus cantinas. We systematized the scores obtained for all these aspects in Table 1.

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Aspect	Score
Urban furniture	2.015
The involvement decision making process at the university level	2.088
The number of garbage bins	2.119
Recreational options	2.181
Time spent in line at the campus cantinas	2.284

**Table 1** The lowest scoring factors in the questionnaires for professors

Source: Authors' calculations and interpretation based on data gathered from the answers to the questionnaire and interviews

In order to assess the stated problems (and subsequently to provide the best costbenefit options to the management of University POLITEHNICA of Bucharest), the common features found in the testimonials that best describe what the issue really is, were selected. We also compared, where possible, the subjective perception with general accepted standards or best practices in order to have a proper and wider perspective over the issues.

Urban or street furniture is the standard professional term for a number of items such as: garbage bins, street light pillars, benches, urban playgrounds, statues, and any other form of urban landscape excluding green areas. From the professors' perspective, the most needed features would be benches, garbage bins, playgrounds and recreational places; the latter appear to be non-existent in the campus area, and the former, insufficient. A playground with various sport possibilities would satisfy the needs for relaxation as for establishing informal connections with colleagues and students. A pavilion would also fit into the description of a recreational place. It might have an alternative use for taking outdoors seminars in the warm season (e.g. spring-early summer).

As there are no national or local rules that define the minimum number of benches or garbage bins per resident, we assumed that the subjective evaluation is the most relevant for students' and professors' needs. Benches are related to relaxation and the number of garbage bins is directly related to a clean environment. Also, given the fact that the third rank problem is precisely the number of garbage bins in the campus, we have both a validation key and a managerial option to improve quality of life with minimum investment.

The involvement in the decision-making process at the university level was difficult to analyze and moreover to propose solutions. The system of selecting the representatives is considered proper as the democratic vote is. But somehow, the main complaints are related to communication between representatives and the represented and vice versa, in what "stating my point of view in the Council" means. This could be easily improved by creating a more direct and formal channel of communication between the represented teachers and those elected to represent them.

Recreational options for the professors in University POLITEHNICA of Bucharest means: a concert-theatre-cinema hall, a recreation room for professors, with the possibility of having a snack or a short nap between classes, a sport area and a

**Table 2** The lowest scoring factors in the questionnaires for students

Aspect	Score
Room space	2.067
Urban furniture	2.194
There is no pharmacy in the campus	2.208
The insufficient ERASMUS programmes promotion	2.221
Bicycle track	2.226

Source: Authors' calculations and interpretation based on data gathered from the answers to the questionnaire and interviews

cafeteria. Although this would need an important financial investment, the benefits would also be significant, as a quiet and relaxing space would benefit professors health, as their job is quite stressful, consuming, and takes place in a rather loud environment.

The time between classes is often short. Having a prepared meal in the campus cantinas is an aspect that increases the quality of life in general. The same is true for most of the teaching staff. Queuing at the main restaurant is one of the main problems that might be relative cheap to solve comparing to the benefits of wellbeing in this campus. Solutions for this aspect are: hiring more personnel at the service of campus residents, doubling the lines of service, increasing the number of cantinas in the campus. It is worth mentioning that the management of the university has already taken into account the opening of a new cantina in the residential space of the campus and work on the new facility has already started.

#### 4.2.2 Students

The aspects that received the lowest scores regarding students' perception about quality of life in the campus are shown in Table 2.

Room space in the dorms leads to the highest decrease of the  $I_{QoLS}$  and, in the end, of the general index. The legal standards in Romania for social dorms is a minimum of  $10~\text{m}^2$  and  $27~\text{m}^3$  for one bed, of  $16~\text{m}^2$  and  $43~\text{m}^3$  volume for two beds, of  $20~\text{m}^2$ , and  $54~\text{m}^3$  for three beds and a minimum of  $26~\text{m}^2$  and  $60~\text{m}^3$  for four beds. The green spaces standards are a minimum of  $2-2.2~\text{m}^2/\text{person}$  (Governmental Ordinance nr. 536, 1997, art. 57). A number of interviewed persons stated that most of a student's life time is spent in the dormitory. Given the fact that the subjective perception is the same with the standard requirements, having more space in dormitories is an option for improving quality of life in campus. That can be achieved by investing in new campus residential buildings or by renting rooms to fewer persons in the existent buildings where extending room space is not an option.

Urban furniture is also important for the students. They are strictly referring to garbage bins and benches and we consider that the explanations and solutions are the same as for professors. A pharmacy that is missing is on the third rank in the importance of factors which decrease the QoL Index. The emergency medical assistance is also an important aspect of the life security need for the campus

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residents. This aspect can be easily solved: the university management should contact various pharmacy chains and offer them an adequate space for opening a new pharmacy. As for many professors and students it would be the easiest to access, it is clear that the pharmacy will have a large number of customers so incomes and profits would be extremely appealing.

The ERASMUS program is insufficiently promoted according to students' opinion. That should be cheap to solve, by a better communication campaign conducted on the social media that students usually use, by direct notifications delivered by the professors in the campus, or by organizing conferences or workshops by the ERASMUS department of the university.

Rethinking the parking management system in the campus and introducing the bicycle tracks (a route connecting the main buildings) will improve the index of the quality of life by minimizing the time spent between classes that are held in different locations by using a bike or a scooter. This will also improve health and the sense of wellbeing in a green campus during the warm seasons. We think that it can be achieved with minimum costs because the campus does not have a problem with the space that the bicycle routes will occupy and they should only be painted.

Besides identifying the aspects with the lowest scores, another important direction would be to highlight the best scoring factors in our questionnaires. As in any SWOT analysis, knowing your strengths can help you analyze and understand the success of the model that applies there, in order to replicate it to other factors that have lower scores. The best scoring factors in the professors' quality of life questionnaire were those related to discriminatory behavior in the workplace, corporal violence suffered by the respondent or others, good feedback from students and prices at the university canteen. The factors and the scores are presented in Table 3.

The best scoring factors in the quality of life questionnaire for students were also those related to discriminatory behavior in the workplace, corporal violence suffered by the respondent or others but also those regarding the importance of large green spaces, dedicated bathrooms for each dorm room and career counselling by university staff. The factors and the scores are presented Table 4.

At a glance it can be seen that for both professors and students, maintaining a discrimination and harassment free environment in the university and maintaining an environment free of violence are very important factors that influence the quality of

Aspect	Score
Factors regarding physical violence and personal safety	4.91
Factors regarding discrimination at the workplace based on sex, religion or race by	4.33
management	
Feedback received from students	4.33
The attitude and openness of the management of the department towards teacher's problems	4.14
Level of prices in the university canteen	4.13

Table 3 The highest scoring factors in the questionnaire for professors

Source: Authors' calculations and interpretation based on data gathered from the answers to the questionnaire and interviews

Aspects	Score
Factors regarding physical violence and personal safety	4.93
The importance of large green spaces for the quality of life in campus	4.87
The importance of an en suite bathroom to all dorm rooms	4.81
Factors regarding discrimination at the workplace based on sex, religion or race by	4.59
management	
The importance of career counselling by the university staff	4.13

**Table 4** Best scoring factors in the questionnaire for students

Source: Authors' calculations and interpretation based on data gathered from the answers to the questionnaire and interviews

life in campus. The scores obtained by those two factors are close to the maximum value of 5. It is clear that the university management has properly addressed those problems in the past and if these actions will continue the results should remain at high levels in the future.

## 5 Conclusions

The general level of satisfaction of students and professors in a university campus influences their performance. As a consequence, we are interested to assess the situation for the University POLITEHNICA of Bucharest. The aim of this paper is to compute a general index for the perceived quality of life in our university, and, more than that, to identify the main issues that have a negative influence on it. Also, we intend to offer suggestions that can be used to improve the current situation.

We find that the perceived quality of life in the University POLITEHNICA of Bucharest is above the medium level. We also find that professors are bothered by the condition of urban furniture, the little involvement in the decision-making process at the university level, the garbage bins number, recreational options, and the time for waiting in line at the campus cantinas; students feel that the following aspects need improvement: room space, condition of urban furniture, lack of a pharmacy in the campus, insufficient promotion for ERASMUS programs, and lack of bicycle tracks.

Taking into consideration the aspects with lowest scores for the perception of professors and students perception, we can mention that some of them are identical for both categories of stakeholders. In the same time, we consider that all the negative issues we analyzed are not very expensive to be tackled for the management of the university and the benefits may appear in a short or medium term, with a positive effect on the quality of life in the campus of University POLITEHNICA of Bucharest. Among these solutions, we suggest: increasing the number of garbage bins, and benches; construction of a playground with various sport possibilities; construction of a pavilion to take outdoor seminars; creating a more direct and formal channel of communication between the represented teachers and those

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elected to represent them; hiring more personnel at the service of campus residents, doubling the lines of service, increasing the number of cantinas in the campus; investing in new campus residential buildings or by renting rooms to fewer persons in the existent buildings where extending room space is not an option; contacting a pharmacy chain to open a new pharmacy in campus; improving communication between ERASMUS department and students; rethinking the parking management system in the campus and introducing the bicycle tracks.

Taking into account our findings, we consider that further studies should focus on solving other remaining issues, and, also, on keeping high scores on those areas of life that currently offer a high level of satisfaction for professors and students.

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# References

- Bhujan, S. N. (2016). Sustainability of Western branch campuses in the Gulf Region: Students' perspectives of service quality. *International Journal of Educational Development*, 49, 314–323.
- Dumitrescu, C. I., Leuştean, B., Lie, I. R., Dobrescu, R. M., & Vulturescu, V. (2017a). Quality of life in a University Campus: Identification of the main determinants which can influence it. In Proceedings of the 29th International Business Information Management Association Conference (pp. 466–473).
- Dumitrescu, C. I., Leuştean, B., Lie, I. R., Dobrescu, R. M., & Vulturescu, V. (2017b). Quality of life in University "Politehnica" of Bucharest Campus: Students' perception. In *Proceedings of* the 29th International Business Information Management Association Conference (pp. 863–875).
- Dumitrescu, C. I., Leuştean, B., Lie, I. R., Dobrescu, R. M., & Vulturescu, V. (2017c). Quality of life in University "Politehnica" of Bucharest Campus: Professors' perception. In EBES (Eurasia Business and Economics Society), 22nd EBES Conference, Rome, 24–26 May 2017.
- Emmerton, L., Fejzic, J., & Tett, S. E. (2012). Consumers' experiences and values in conventional and alternative medicine paradigms: A problem detection study (PDS). BMC Complementary and Alternative Medicine, 10, 12–39.
- Governmental Ordinance regarding the approval of sanitary rules and the recommendations regarding the life environment of the population, nr. 536, 1997, art. 57: Romanian Government.
- Hajrasouliha, A. H. (2017). Campus score: Measuring university campus qualities. *Landscape and Urban Planning*, 158, 166–176.
- Jallow, A., Sporrong, S. K., Walther-Jallow, L., Persson, P. M., Hellgren, U., & Ericsson, O. (2007). Common problems with antiretroviral therapy among three Swedish groups of HIV infected individuals. *Pharmacy World & Science*, 29(4), 422–429.
- Klein, G., Pliske, R., Crandall, B., & Woods, D. (2005). Problem detection. Cognition Technology and Work, 7(1), 14–28.
- Kleindorfer, P. R., Kunreuther, H. C., & Schoemaker, P. J. H. (1993). *Decision sciences An integrative perspective*. Cambridge: Cambridge University Press.

- Lunneryd, D., & Öhlmér, B. (2006). Problem detection and definition The case of farmers' choice of organic milk production. In *The 99th EAAE seminar 'trust and risk in business networks'*, 8–10 February 2006, Bonn.
- Wade, A. H., Weir, D. N., Cameron, A. P., & Tett, S. E. (2003). Using a problem detection study (PDS) to identify and compare health care provider and consumer views of antihypertensive therapy. *Journal of Human Hypertension*, 17, 397–405.

# **Development of Strategic Partnerships for Work-Based Learning**



Ilze Buligina and Biruta Sloka

**Abstract** Competitiveness of companies on local and international markets greatly depends on skilled labor force. There is an increased need for well-trained medium level specialists prepared by the vocational education and training (VET) systems. For countries with school-based VET systems tailor made approaches for workbased learning need to be implemented. This requires also new strategic partnerships. In Latvia in 2016 legal regulation on work-based learning was adopted. However, there is little research on the pre-conditions enabling the public administration to implement innovative VET approaches. The purpose of the study is to investigate the opinions of relevant public stakeholders from the education, employment and economic sectors regarding innovation in VET and the feasibility of strategic partnerships in this regard. The methods used: public administrators' survey results analysis in scale of 1-10. For data processing of survey results indicators of descriptive statistics (means and indicators of variability) as well as cross tabulations and multivariate analysis—factor analysis were applied. For countries with schoolbased systems work-based learning as an innovative form of VET requires partnerships by public stakeholders from various branches. Strategic partnerships beyond the national level might be beneficial, especially among countries with historically similar educational and cultural backgrounds.

**Keywords** Work-based learning  $\cdot$  Innovation  $\cdot$  Vocational education and training  $\cdot$  Partnerships  $\cdot$  Competitive labor force

## 1 Introduction

Competitiveness of companies on local and international markets greatly depends on skilled labor force. Research indicates that work-based learning and apprenticeship schemes in VET in European countries like Germany, the Netherlands, Austria,

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Denmark greatly contributes to the labor force quality. For countries with schoolbased systems like Latvia work-based learning is an innovation and specific tailor made approaches for its introduction need to be implemented. This requires also new strategic partnerships involving stakeholders from the education, employment and business environment. In Latvia research on work-based learning has been carried out before 2016 prior to the adoption of legal regulation on systemic approaches at national level. However, there is little research on the pre-conditions that have enabled the Latvian public administration to successfully implement VET reforms concerning work-based learning. As in public policy opinions of various stakeholders are to be taken into consideration when innovative approaches are being introduced at systemic level, these opinions can be viewed as enabling or hindering factors for the success of the reform. Therefore, the present research apart from studying the opinions of public administrators from various sectors as enabling preconditions for the introduction of work-based learning has also broader implications regarding innovation in VET as such. The topicality of research is determined by international trends in vocational education and training. Today the need for the training of a competitive labor force at all levels is a high European Union education and training policy priority. There is a growing focus on VET and work-based learning developments in Europe. In the context of employment and employability new challenges emerge for bringing closer the world of education with the world of work. Due to this there is also an increasing amount of academic research and European Union policy discourse dedicated to innovative approaches in VET. As a result of this initiation, development, testing and implementation new systemic solutions by public administrations require also new forms of governance and formation of new strategic partnerships at local, regional, national, as well as international level to promote employability of the workforce.

The purpose of the study is investigate the opinions of public administrators regarding innovation in VET as a pre-condition for the implementation of work-based learning in Latvia. Tasks for the research: are: (1) Investigation of scientific findings reflected in scientific publications on work-based learning experience in Europe; (2) Analysis of results of public administrators' survey performed by the authors of the paper—regarding the opinions of public administrators on innovation in VET; (3) Drawing conclusions on the relevance of strategic partnerships by various public stakeholders for the implementation of work-based learning as an innovative VET approach for countries with school-based VET systems; (4) Linking national experiences with broader cross-border contexts in relation to strategic partnerships by public administrations.

The principal method used in this study is analysis of public administrators' survey results. In the public administrators' survey various aspects of VET innovation were analyzed in scale of 1–10. For data processing of survey results indicators of descriptive statistics (means and indicators of variability) as well as cross tabulations and multivariate analysis—factor analysis were applied.

# 2 Theoretical Findings from Research on Work-Based Learning

The organization of vocational education and training in the form of work-based learning is on research agenda for researchers world-wide and various aspects of the process is under profound analysis including team building for practical placement organizations (Brewer et al. 2017). A range of criteria for the analysis of various aspects of work organization and forms of employee learning in different national systems (by comparing 17 countries) of education and training yield valuable information for further developments (Lorenz et al. 2016). Curricula and learning arrangements for work-based training have close attention by several stakeholders. since competitive and internationally recognized education has to be carefully planned (Zitter et al. 2016) and competences in vocational education and training have to be clearly formulated (Biemans et al. 2009). Aspects on crossing strict boundaries between school and work during apprenticeships are also in the center of attention by academic researchers (Akkerman and Bakker 2012). Studies on crossing strict boundaries and still maintaining differences between school and industry regarding different forms of boundary-work in Swedish vocational educa tion has been performed and discussed in academic and professional environment (Berner 2010). New approaches in vocational education and training have new tasks and teaching approaches also for educators (De Bruijn and Leeman 2011). Industry—school partnerships are important in various aspects that need attention (Pillay et al. 2014). Various branches of industry have their experience and their specific requirements for work-based training organization and realization (Jee et al. 2017). All involved stakeholders are important with their views regarding the workbased learning organization aspects including views of students (Statham and Scullion 2017). OECD countries pay close attention to the quality of labor and perform academic analysis on different aspects including cultural, political and economic roots of the labor market institutional framework in the OECD and postsocialist countries (Pilc 2017). Aspects of self-selection and learning-by-exporting hypotheses: micro-level evidence are analyzed in detail (Rehman 2017). Analysis of stakeholders' conceptions and discussion in academic and professional environment on connecting learning at different sites in two national VET systems yield important data for further studies—where learning through active participation and engagement in education and workplace settings is found as a prerequisite for effective professional competence development through vocational education and training; equally import has been the finding that learning from multiple sites and sources needs to be purposefully connected and integrated to construct meaningful knowledge and understanding—the quality of connectivity and learning outcomes is influenced by conceptions of the different actors (Sappa et al. 2016). Various branches of industry, especially fast developing industries like high-tech sector search for special sources of knowledge used by entrepreneurial firms in the European high-tech sector (Amoroso et al. 2018). Several new approaches in teaching methods, like gamification, is increasingly used also in work-based learning (Sánchez-Martín et al. 2017). Innovations, labor force quality and creative entrepreneurs are of great importance in knowledge based economy (Śledzik 2013; Kultti et al. 2015). Economic policy and policy decisions are critically relevant (Demir and Gozgor 2018; Demir and Ersan 2017). R&D spillovers and information exchange by a case study has underlined important aspects of qualified employees (Kultti et al. 2015). Factors influencing the entrepreneurial engagement of opportunity and necessity-including "pull" and "push" aspects of motivation are also on research agenda for academic researchers (Van der Zwan et al. 2016). For the application of gamification teaching methods academic research has been performed also on the motivation of students (Buckley and Doyle 2014). Different countries use different research methods for the investigation of work-based training organizations activities and their achieved results (Van Praag et al. 2017). In depth analysis has been carried out on the priority issues in research in other countries regarding innovation as the driving force for competitiveness, the issue of skills and competences and the need for innovation to address skills' mismatch, the importance of employers and social partners to increase the compliance of training with the actual labor market needs, the institutional mechanisms and co-operation models between public administrations, training organizations and employers, the increasing role of practical training and apprenticeship/work-based learning approaches.

EU tools are seen as part of internationalization of VET: An increased attention is being paid to learning outcomes based qualification frameworks for an improved European Qualifications Framework (EQF) implementation (European Parliament 2008)—revised in 2017. The European Credit System for Vocational Education and Training (ECVET)—as an instrument to facilitate the transfer, recognition and accumulation of assessed learning outcomes (LO)—under revision currently. The European Commission (EC) and European Centre for the Development of Vocational Training (Cedefop) have carried out a range of studies and developed policy documents to promote VET developments and the training of competitive labor market participants (EC 2012; Cedefop 2010, 2011, 2012a, b, c). In addition, in 2015 Cedefop has performed extensive study based on survey on skills, qualifications and jobs in the EU with attention of the best match (Cedefop 2015).

# 3 Empirical Research Results for VET Innovation and Work-Based Learning in Latvia

Parallel to the public administrators' survey analysis the following factors and data were taken into account:

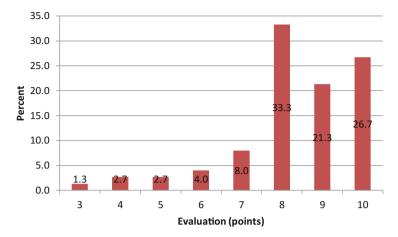
 Studies of the practice from countries with traditional apprenticeship or dual systems—e.g. Germany, Austria, Switzerland; Bi-lateral agreements of Latvia with Germany and Switzerland; Multilateral agreements—Memorandum on co-operation in VET in Europe (Berlin, December 2012);

- EU VET policy approaches—Riga Conclusions, endorsed in Riga June 22, 2015 during the Latvian Presidency of the Council of the European Union;
- European Alliance for Apprenticeships (EAfA) 2013; Baltic Alliance for Apprenticeships (BAfA) 2015;
- EU supported initiatives for policy innovation—e.g. implemented and ongoing projects on VET reforms and work-based learning within Erasmus+ calls for proposals with the participation of public administrations (ministries) as project partners—with wider implication for a cluster of countries with similar historical, cultural and educational background (Latvia, Lithuania, Estonia): project "National Authorities for Apprenticeships: Implementing Work Based Learning in Latvia, Lithuania and Estonia (WBL Balt)" (hereinafter—WBL Balt project), finished February 2017 and a new joint Baltic initiative started February 2017—Erasmus+ project "Testing New Approaches to Training VET and Workplace Tutors for Work Based Learning (TTT4WBL)" (hereinafter—TTT4WBL project)—with the participation of a Finnish research institute apart from the ministries of the three Baltic states.

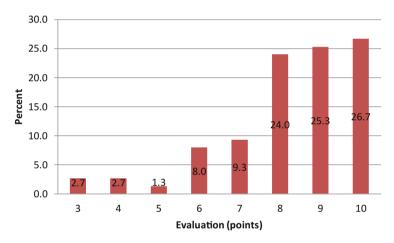
A survey among the public administrators was carried out by Buligina, 2015—including high and medium level managers and experts from the ministries of education, economy and employment (welfare), as well as experts of agencies under the supervision of the above mentioned ministries: sample reached 130 respondents, the response rate was 87%, respondents were selected and approached as they all are experts in the development or monitoring of the introduction of work-based learning and making proposals for the implementation of work-based learning in Latvia. The need to involve in the study managers and experts from various ministries was determined by the fact that innovative approaches in education can be introduces only in strategic partnership with relevant public actors, namely, the involved branch ministries (Buligina and Sloka 2016). A prior analysis of the opinions of all the relevant stakeholders is being viewed in the research as an indicator of the feasibility of the planned reforms. A high evaluation was allocated by public administrators and experts regarding the need for innovation competent VET specialists in enterprises—see Fig. 1.

The results of the survey confirm the public administrators' awareness on the need of innovation competent vocational education and training specialists in enterprises; this corresponds to the research findings in other countries as well as to the data in scientific publications as part of the study (Fig. 2).

Since the implementation of innovative approaches by public administrations (e.g. as in the case of introducing work-based learning in countries with school-based systems) requires also the formation of new strategic partnerships, the survey had a particular focus on the opinions of public administrators regarding the relevance of stakeholders' co-operation and involvement. Main statistical indicators of descriptive statistics on evaluations of public administrators' opinions on the importance of stakeholder's involvement in work-based learning implementation in Latvia are included in Table 1.



**Fig. 1** Evaluations of public administrators on the need for innovation competent VET specialists in enterprises (Evaluation scale 1–10, where 1—not important; 10—very important). Source: Authors' own study or based on Ilze Buligina conducted survey (2015)



**Fig. 2** Evaluations of public administrators on the need to strengthen VET regarding innovation (Evaluation scale 1–10, where 1—not important; 10—very important). Source: Authors' own study or based on IIze Buligina conducted survey (2015)

Results of the survey indicate that the views of public administrators are highly different, as almost all the range of the evaluation scale is covered for most of the evaluations; the highest evaluations were allocated for "Professional organizations/ associations should more get involved in VET governance" with arithmetic mean of the evaluations 8.06 with the most frequent evaluation 10 (characterized by mode); half of the respondents allocated evaluation 8 or less and half of the respondents allocated evaluation 8 or more (characterized by median). The lowest evaluations were allocated for "Ministries sufficiently coordinate their activities for jointly

	1				<i>C</i> 1	
				The local		
		Ministries		governments		
		sufficiently	Sectoral	have a		
		coordinate their	associations	significant role	The	Professional
		activities for	are	in promoting	planning	organizations/
		jointly	sufficiently	the compliance	regions	associations
		addressing	involved in	of VET with the	should	should more
		education and	the training of	local labor	more get	get involved
		employment issues	a competitive labor force	market demands	involved in VET	in VET
	T					governance
N	Valid	116	112	111	112	112
	Missing	6	10	11	10	10
Me	an	5.11	6.28	6.10	7.85	8.06
Std. error of		0.184	0.170	0.242	0.195	0.173
mea	an					
Me	dian	5	6	6	8	8
Mo	de	5	7	8	10	10
Std		1.986	1.797	2.551	2.063	1.832
dev	riation					
Vai	riance	3.944	3.229	6.508	4.256	3.356
Rar	nge	8	8	9	9	9
Miı	nimum	1	2	1	1	1
Marrianna		0	10	10	10	10

**Table 1** Main statistical indicators of descriptive statistics on evaluations of public administrators on the importance of stakeholder's involvement in work-based learning implementation in Latvia

Source: Authors' own study or based on Ilze Buligina conducted survey (2015), evaluation scale 1–10, where 1—not important; 10—very important

**Table 2** Correlations on public administrators' evaluations to the question "Do you support further introduction of work-based learning in Latvia when the learner spends a much greater proportion of time in practical training at an enterprise"

	Your experience in the indicated field of competence	Gender
Pearson correlation	$-0.236^*$	0.110
Sig. (2-tailed)	0.014	0.261
N	107	107

Source: Authors' own study or based on Ilze Buligina conducted survey (2015)

addressing education and employment issues" with arithmetic mean of evaluations 5.11 and mode 5, median 5; for this statement no respondents allocated the highest evaluation.

The evaluations of public administrators were lower for public administrators with more experience in public administration but had no difference by gender—see correlation coefficients included in Table 2.

For more detailed insights on public administrators' evaluations on the aspect "What centralized activities do you consider as relevant for a successful introduction

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed)

**Table 3** Complex factors (by Rotated Component Matrix) on Public Administrators Evaluations on the aspects "What centralized activities do you consider as relevant for a successful introduction of work-based learning in Latvia?"

	Component		
	1	2	3
Support to the enterprise during the organization of the work placement	0.718	0.240	0.179
Possibility to be flexible in the provision of the theoretical studies according to the employers needs	0.738	0.290	0.125
Individual consultations for the employers	0.101	0.125	0.881
Information campaigns in mass media	0.142	0.461	0.748
Material support by the state to the mentors working with trainees at an enterprise	0.611	0.603	0.012
Tax reduction for enterprises involved in WBL	0.236	0.841	0.129
Improved legal framework	0.173	0.822	0.332
Pedagogical/methodological support to mentors working with trainees at an enterprise	0.657	-0.167	0.586
Compensation to employer's for covering trainees expenditure on transport fees, specialized clothing etc.	0.629	0.542	-0.005
Coordinated activities by public administration institutions in addressing training and employment issues	0.765	0.144	0.119

Source: Authors' own study or based on Ilze Buligina conducted survey (2015), evaluation scale 1–10, where 1—not important; 10—very important

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in seven iterations

of work-based learning in Latvia?" resulting from multivariate analysis approach realized by factor analysis is included in Table 3.

As a result of one of multivariate statistics analysis methods—factor analysis on public administrators evaluations presented in Table 3 on the analyzed aspect "What centralized activities do you consider as relevant for a successful introduction of work based learning in Latvia?" with *varimax* rotation in seven iterations—three complex factors had been calculated with the following titles:

Complex Factor I—Organizational;

Complex Factor II—Legislation support;

Complex Factor III—Informational.

As result of factor analysis on public administrators' evaluations presented in Table 4 on the aspect "In your opinion, what could raise the vocational education and training (VET) prestige" with *varimax* rotation in seven iterations three complex factors were identified—with the following titles:

Complex Factor I—Material and Recognition Support;

Complex Factor II—Information Support;

Complex Factor III—Learning Environment and Learning Content Improvement.

**Table 4** Complex factors (by Rotated Component Matrix) on Public Administrators Evaluations on the Aspect "In your opinion, what could raise the Vocational Education and Training (VET) prestige"

	Component		
	1	2	3
Higher salaries for medium level specialists	0.770	-0.034	0.075
WBL where the employers pays a salary or grant to the trainee	0.776	0.120	0.319
Information campaigns in mass media promoting and praising professional specialists	0.671	0.074	0.387
Modern learning environment	0.223	0.105	0.873
Modern and innovation oriented VET content	0.041	0.193	0.835
A dialogue with children and their parents in pre-school and primary education on the advantages of the choice of a suitable profession	0.058	0.750	0.118
Promoting a higher social status for VET learners	0.707	0.561	-0.190
Promoting a higher social status for middle level specialists	0.773	0.507	-0.194
Awards and prizes by enterprises and sectors for medium level specialists	0.239	0.774	0.125
More job opportunities at technology oriented enterprises	-0.001	0.550	0.376

Source: Authors' own study based on IIze Buligina conducted survey (2015), evaluation scale 1–10, where 1—not important: 10—very important

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in seven iterations

The research findings are being seen as useful in further development of information campaigns for various stakeholders and partnerships involved in VET reforms (especially in relation to the introduction of work-based learning) in Europe.

Apart from the survey conducted by Ilze Buligina in 2015 (Buligina and Sloka 2016) on the opinions of public administrators regarding the need of innovation of VET, another survey on similar issues was performed by Ilze Buligina already in 2012 (Buligina and Sloka 2014). Thus, it was possible to compare the results and the dynamics of opinions in 2012 and 2015: In 2012 more traditional opinions were prevailing among the public administrators regarding the relevance of VET in the labor force innovation processes—innovation was not seen as relevant in VET developments. In 2012 survey results little role was assigned to the need for co-operation among the policy makers and administrators in HE and VET and in research and VET. In 2015 survey there is a much more uniform evaluation regarding the relevance of training by HE and VET institutions in the labor market and innovation processes. There is an increasing opinion that specialists with VET education need to be innovation competent.

Regarding transnational partnerships in promoting VET reforms and work-based learning developments, Buligina and Sloka (2014, 2016) indicate an increase in Baltic co-operation in relation to the European Union Erasmus+ projects WBL Balt and TTT4WBL to promote policy innovation and reforms. As agreed upon during the international Baltic seminar 24 January, 2017 as part of the European Union Erasmus+ WBL-Balt project—countries with similar historical, cultural and

educational backgrounds should form transnational strategic partnerships to promote innovation in VET, including work-based learning. It has been proposed to develop continued cooperation at different levels with more emphasis on VET institutions' associations and business sector associations' involvement—apart from the already existing co-operation and strategic partnerships among the public administrations in education (ministries). A particular emphasis has been put on the following issues: (1) potential developments of joint VET programs and qualifications; (2) enhanced cooperation among Baltic employers on the implementation of work-based learning.

### 4 Conclusion

Work-based learning as an innovative form of VET for countries with school-based systems needs to be implemented in compliance with specific national contexts. Joint approaches by the involved public stakeholders from various branches are relevant for the success of the VET reform. Strategic partnerships beyond the national level could be beneficial, especially among countries with historically similar educational and cultural backgrounds. Strategic partnerships at national and at cross-border level can also be a source for identifying new challenges to be address for a successful implementation of work-based learning for the training of a competitive labor force in broader global contexts. Increasing attention is paid to different aspects of work-based training organization world-wide including research on organization of work-based learning and investigation of views of all involved groups of stakeholders. The Latvian public administrations are becoming increasingly aware on the need for the promotion of new approaches in VET for the training of a competitive labor force at all levels. Concrete measures have been taken for improved linkage of VET to the actual work environment through the implementation of work-based learning approaches. New tendencies can been observed regarding the change of thinking paradigms on the need for co-operation among public administrators in VET, higher education and research, against the more traditional approaches, much more prominent in 2012. The public administrations in Latvia are open to the initiation and implementation of new forms of strategic partnerships and governance. There are favorable preconditions for increasing co-operation on VET and WBL on the Baltic level itself and to promote the Baltic level as a competitive space for VET at a broader European level. Work-based learning needs to be implemented in compliance with specific national contexts. The success of the stakeholder co-operation in introducing work-based learning in Latvia can serve as a model for other countries with school based VET systems aiming at introducing work-based learning or apprenticeship-type schemes.

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# References

- Akkerman, S. F., & Bakker, A. (2012). Crossing boundaries between school and work during apprenticeships. *Vocations and Learning*, 5(2), 153–173.
- Amoroso, S., Audretsch, D. B., & Link, A. N. (2018). Sources of knowledge used by entrepreneurial firms in the European high-tech sector. *Eurasian Business Review*, 8(1), 55–70.
- Berner, B. (2010). Crossing boundaries and maintaining differences between school and industry: Forms of boundary-work in Swedish vocational education. *Journal of Education and Work, 23* (1), 27–42.
- Biemans, H., Wesselink, R., Gulikers, J., Schaafsma, S., Verstegen, J., & Mulder, M. (2009). Towards competence-based VET: Dealing with the pitfalls. *Journal of Vocational Education and Training*, 61(3), 267–286.
- Brewer, M. L., Flavell, H. L., & Jordon, J. (2017). Interprofessional team-based placements: The importance of space, place, and facilitation. *Journal of Interprofessional Care*, 31(4), 429–437.
- Buckley, P., & Doyle, E. (2014). Gamification and student motivation. *Interactive Learning Environments*, 22(6), 1–15.
- Buligina, I., & Sloka, B. (2014). Investing in skills and innovation New strategic tasks for public administrations. *European Integration Studies*, 8, 115–123.
- Buligina, I., & Sloka, B. (2016). Strategic partnerships for the development of competitive labor force through vocational education and training. *Entrepreneurship Business and Economics*, 3 (1), 229–244.
- Cedefop. (2010). *The development of ECVET in Europe* (Cedefop working paper; No 10). Luxembourg: Publications Office. [online] Accessed February 10, 2017, from http://www.cedefop.europa.eu/EN/Files/6110\_en.pdf
- Cedefop. (2011). The development of ECVET in Europe (Cedefop working paper; No 14). Luxembourg: Publications Office. [online] Accessed February 12, 2017, from http://www.cedefop.europa.eu/EN/Files/6114\_en.pdf
- Cedefop. (2012a). Necessary conditions for ECVET implementation. Luxembourg: Publications Office. [online] Accessed March 16, 2017, from http://www.cedefop.europa.eu/EN/Files/4113\_en.pdf
- Cedefop. (2012b). Development of national qualifications frameworks in Europe: October 2011 (Cedefop working paper; No 12). Luxembourg: Publications Office. [online] Accessed March 22, 2017, from http://www.cedefop.europa.eu/EN/Files/6112\_en.pdf
- Cedefop. (2012c). *The development of ECVET in Europe 2011* (Cedefop working paper; No 14). Luxembourg: Publications Office. [online] Accessed March 15, 2017, from http://www.cedefop.europa.eu/EN/Files/6114\_en.pdf
- Cedefop. (2015). Skills, qualifications and jobs in the EU: The making of a perfect match? Evidence from Cedefop's European skills and jobs survey. Luxembourg: Publications Office of the European Union [online] Accessed February 16, 2017, from http://www.cedefop.europa.eu/en/publications-and-resources/publications/3072
- De Bruijn, E., & Leeman, Y. (2011). Authentic and self-directed learning in vocational education: Challenges to vocational educators. *Teaching and Teacher Education*, 27(4), 694–702.
- Demir, E., & Ersan, O. (2017). Economic policy uncertainty and cash holdings: Evidence from BRIC countries. *Emerging Markets Review*, *33*, 189–200.
- Demir, E., & Gozgor, E. (2018). Does economic policy uncertainty affect Tourism? *Annals of Tourism Research*, 69, 15–17.
- European Commission. (2012). Proposal for a Council recommendation on the validation of non-formal and informal learning. COM(2012) 485 final. [online] Accessed February 23, 2017, from <a href="http://ec.europa.eu/education/lifelong-learning-policy/doc/informal/pro-posal2012\_en.pdf">http://ec.europa.eu/education/lifelong-learning-policy/doc/informal/pro-posal2012\_en.pdf</a>
- European Parliament. (2008). Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong

- learning (2008/c 111/01). [online] Accessed January 31, 2017, from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN
- Jee, S. D., Schafheutle, E. I., & Noyce, P. R. (2017). Using longitudinal mixed methods to study the development of professional behaviours during pharmacy work-based training. *Health and Social Care in the Community*, 25(3), 975–986.
- Kultti, K., Takalo, T., & Tanayama, T. (2015). R&D spillovers and information exchange: A case study. *Eurasian Economic Review*, 5(1), 63–76.
- Lorenz, E., Lundvall, B.-A., Kraemer-Mbula, E., & Rasmussen, P. (2016). Work organisation, forms of employee learning and national systems of education and training. *European Journal of Education*, 51(2), 154–175.
- Pilc, M. (2017). Cultural, political and economic roots of the labor market institutional framework in the OECD and post-socialist countries. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 12(4), 713–731.
- Pillay, H., Watters, J. J., Hoff, L., & Flynn, M. (2014). Dimensions of effectiveness and efficiency: A case study on industry–school partnerships. *Journal of Vocational Education & Training*, 66 (4), 537–553.
- Rehman, N. U. (2017). Self-selection and learning-by-exporting hypotheses: Micro-level evidence. *Eurasian Economic Review*, 7(1), 133–160.
- Sánchez-Martín, J., Cañada-Cañada, F., & Dávila-Acedo, M. A. (2017). Just a game? Gamifying a general science class at University: Collaborative and competitive work implications. *Thinking Skills and Creativity*, 26, 51–59.
- Sappa, V., Choy, S., & Aprea, C. (2016). Stakeholders' conceptions of connecting learning at different sites in two national VET systems. *Journal of Vocational Education and Training*, 68 (3), 283–301.
- Śledzik, K. (2013). Knowledge based economy in a neo–Schumpeterian point of view. *Equilibrium Quarterly Journal of Economics and Economic Policy*, 8(4), 67–77.
- Statham, A., & Scullion, J. (2017). Assessing students' reflections on work-placed modules. *European Political Science*, 16(2), 148–158.
- Van der Zwan, P., Thurik, R., Verheul, I., & Hessels, J. (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review*, 6 (3), 273–295.
- Van Praag, L., Van Caudenberg, R., Nouwen, W., Clycq, N., & Timmerman, C. (2017). How to support and engage students in alternative forms of education and training? A qualitative study of school staff members in Flanders. *Journal of Education and Work, 19*, 1–13.
- Zitter, I., Hoeve, A., & de Bruijn, E. (2016). A design perspective on the school-work boundary: A hybrid curriculum model. *Vocations and Learning*, 9(1), 111–131.

# Part IV Management

# Quality of Life in University POLITEHNICA of Bucharest Campus: Professors' Perception



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Abstract A university campus can be considered similar to a miniature urban space. The residents' moral and intellectual features are the main differences between the two spaces. Studies on job burnout suggest that the work environment, life and work satisfaction have a great influence on the quality of work performed. As the quality of education offered in University POLITEHNICA of Bucharest (UPB) is extremely important, this article aims to assess the quality of life in campus as it is perceived by professors in the University; we also intend to identify the aspects that can be improved, in order to obtain even better results regarding teaching and research activity. The study was carried out using a self-administered questionnaire, which was sent to UPB professors via email. We analyze their answers and discuss the results obtained. As a conclusion we calculate the Quality of Life Index for Professors IQoLP, and detect the issues that need to be addressed, as they have a negative influence on their performance.

**Keywords** University campus · Index · Quality of life · Professors' perception

#### 1 Introduction

This paper continues our extensive research (Dumitrescu et al. 2017a, b), aiming to determine an index to assess the quality of life at the University POLITEHNICA of Bucharest campus. The aim here is to evaluate the perceived quality of life of

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professors, as it has an important influence on their performance, which is strongly related to the prestige of the university and to the professional training of students.

We assess professors' opinion using questions based on a Likert type scale. While creating the questionnaire, typical questions for professors were considered, but we also included factors that usually determine job burnout for any kind of employee. Burnout is associated with exhaustion, different physical illnesses, depression and poor performance (Bakker and Costa 2014; Patlán Pérez 2013); professors suffering from it can become sick, depressed which leads to less performant activity in their academic work; consequently it is followed by poor quality of research and teaching. All these issues are translated into less educated students, less competitive results in competition on the labor force market, and lower prestige of the university.

Fortunately, our research shows that professors' level of satisfaction regarding life in campus is above medium. They are very satisfied by the safety and respect to people offered in campus; on the other hand, professors consider that communication at university and faculty level, as well as some practical aspects regarding life in campus need improvement.

The second section of the paper presents the questionnaire used in order to assess professors' perception and the main reasons behind these questions. The third section shows the methods used to analyze data we collected. In the fourth part of the paper the main results obtained are presented, as well as conclusions with the overall evaluation of results and with further directions for this research.

## 2 Quality of Life for Professors: The Questionnaire

In this section, the questionnaire that was filled in by the professors working in the POLITEHNICA University of Bucharest is presented, also mentioning the main reasons for each question. Several factors mentioned in studies focusing on job happiness and job burnout were included in this assessment, especially for teachers, but also questions arising from our personal experience of authors as university employees were presented. Burnout assessment is very important in this particular case, as professors are among professionals who do "people work", so studies show they are more liable to suffer from this emotional exhaustion and cynicism (Maslach and Jackson 1981). Job burnout can determine negative attitude towards students, chronic fatigue, and can make teachers distance themselves emotionally and cognitively from their work activities (Maslach and Jackson 1981; Bakker and Costa 2014). All these can lead to poor performance regarding the teaching activity, which has a serious impact on the professional training of students: when suffering from these problems professors can be detached and not care if students understand courses or not, or, even worse, they can have a negative, violent attitude towards students, affecting their interest for the subject and even their well-being. This opinion is supported by studies that show that the quality of services burnt-out people offer is negatively affected by their suffering (Patlán Pérez 2013; Collie and Martin 2017).

The complete questionnaire is attached in the Appendix of this paper. It this section it is mentioned only the main reasons behind each set of questions, focusing on some particular items, aiming at a better understanding of this research.

The first section of the questionnaire assesses the general opinion of professors have about their workplace, the University POLITEHNICA of Bucharest; for example, we ask them if they are happy with the prestige of the university, with its development, if they are satisfied with their workplace and if their needs are satisfied here, all these because it was shown that dissatisfaction with the workplace is one of the main reasons behind suffering from job burnout, which consequently lowers the quality of life (Bakker and Costa 2014; Patlán Pérez 2013).

The second and third sections of the questionnaire contain questions regarding the faculty and department that professors are working for. Besides individual factors and working with people (students), studies mention stressful events, lack of worker's autonomy, lack of feedback from higher hierarchy, rewards missing, lack of among burnout causes (Patlán Pérez 2013; Lie et al. 2014). Also, it was shown that an important risk factor for university professors is the quality of the leadership (García et al. 2016). As a consequence, questions assessing the leadership of the faculties and departments were included, professors' relationships with their higher hierarchy (e.g. deans and heads of departments), quality of communication with these superiors, and about the way they provide opportunities for promotion. Also, the level of satisfaction at working place is strongly linked with the working environment; this is why questions regarding relationships with peers, and within teams were included.

The following section is common with the questionnaire addressed to students, as safety and human dignity are important aspects in any person's life, no matter their age. As it has been shown in the paper studying students' perception on the quality of life in campus, humiliation and living in an unsafe environment affect the mental health, and thus, the well-being of any person (Dumitrescu et al. 2017b). Insecurity, physical and psychological abuse can cause depression, which can also lead sleep disorders (Wallace et al. 2017) and, as a consequence, it leads to poor intellectual performance, which is unacceptable for employees whose jobs require high levels of intellectual performance, both for teaching, and for scientific research.

Studies also mention wages and opportunities for career development among factors that influence the psychological well-being of employees (Lie et al. 2014; García et al. 2016), this is why the following section of our questionnaire contains questions about professors' perception on opportunities for professional development, on support they receive from the university, on research opportunities and activities, and also, on their wages and other non-monetary benefits provided by the university. An important aspect when referring to the quality of life is the satisfaction felt while exercising one's job, so questions to assess professors' contentment regarding their professional activities and the final results of their work were included. Most of the studies on burnout mention workload as a key factor determining this syndrome (Bakker and Costa 2014) so the authors were also interested to see how professors assess the work-leisure balance in their lives. Job burnout do not have only psychological symptoms, in most of the cases it also leads to physical

suffering, from head/stomachaches and neck pains, to more severe sufferings (Bakker and Costa 2014). As a consequence, in the questionnaire colleagues were asked to assess the influence their work has on health condition.

The second to last section of this questionnaire includes questions from different areas of practical interest, some of them common to those asked to students, for example questions regarding the medical services offered in campus, or the type and quality of food they offered in campus. We considered that eating habits are important issues for teachers as well, because obesity and other food related disorders can also diminish the quality of their lives. Moreover, similar with students, professors have little time between classes, they do not eat on regular basis; as a consequence, their meals are limited to what is offered to canteens and shops from the campus. This section also includes questions about the material endowment of the campus, green spaces, as it was shown that these aspects can also influence people's well-being. As an example, medical research proved that hoarseness, a very common illness for professors, is strongly correlated with the levels of noise, air contamination, stress, and anxiety suffered by them (Polacow-Korn et al. 2015).

When creating the questionnaire for students, the last section of the questionnaire has two aims: the first one, to see the overall opinion of professors about aspects most influential in their lives; this will also help to weight each category of questions when constructing the index; the second one, to find out if respondents consider that there are other factors that influence their quality of life and were not included in our research.

### 3 Methodology

The study is based on a self-administered questionnaire, where most of the questions are based on a Likert type scale. For the first part of the analysis, we have determined the structure of the responses for each question.

As the focus of the research was to construct an index of the quality of life in campus for professors we started doing this by determining the average score for each question. An equal weight for each question in the category was used in order to calculate the average score for each section of the questionnaire. The importance of each category in the questionnaire was ranked by respondents and that ranking was used to generate and assign different weights to each section. Using those weights the formula we used is showed below in order to calculate the index of quality of life in campus for professors.

$$I_{OoL} = \alpha_1 \times C_1 + \alpha_2 \times C_2 + \alpha_3 \times C_3 + \alpha_4 \times C_4 + \alpha_5 \times C_5 + \alpha_6 \times C_6$$
 (1)

where  $\alpha_1$ ;  $\alpha_2$ ;  $\alpha_3$ ;  $\alpha_4$ ;  $\alpha_5$ ;  $\alpha_6$  are the weights assigned to each category.

#### 4 Empirical Findings

#### 4.1 Results of the Questionnaire

This section is dedicated to the analysis of answers given by professors of the University POLITEHNICA of Bucharest to the almost 100 questions asked in the questionnaire. As there are so many questions, with almost 200 answers each, the database is available on request.

Regarding the first set of questions, the answers show a medium-high level of satisfaction: professors are happy with the prestige and development of the university, and are also satisfied with the fact that they work here. This is a very important aspect, taking into account that not being satisfied with one's workplace is a determining factor for burnout and low quality of life. What is worth mentioning here is that a vast majority of professors are not involved in the decision-making process in the university. In our opinion, this is an aspect that can be improved, as involving employees in the process of decision makes them feel appreciated and strengthens their connection with the organization.

The level of satisfaction towards the faculty they belong to is also medium-high for most of the professors. Even if they are not involved in decisions taken by the university, most of them feel they are encouraged to express their opinions and suggestions, and, moreover, they feel the management is open to listen to them. Overall, the communication at faculty level is considered to be good, regarding timing and relevance. What is a little disturbing and surely needs a deeper assessment at each faculty's level is that more than 10% of the professors feel that there are no equal chances to promotion. This is a serious problem, because, as we were mentioning before, the lack of opportunities to develop the career can lead to burnout, depression, lack of interest and poor quality of work.

When assessing the same factors as before, this time at department level, it has been noticed that the situation is even better. There is good communication, the management is open to discussions new ideas, and the working environment across teams is satisfactory. Moreover, at this level, there are significantly less people who fell there are no equal chances for promotion for everybody.

As it was the case for students, the section regarding safety and human dignity offers some disturbing feedback. On one hand professors feel quite safe in the university campus and consider the training of the security guards satisfactory. On the other hand, many professors (16.6% of the respondents) have witnessed cases of discrimination, and an alarming number were victims of it (12%). Also, even more, (28% of them), have witnessed psychological violence, and 18.1% were victims of it. These alarming figures shows that the situation needs a deeper analysis, in order to be improved, because discrimination and violence leads to depression, and low quality of life, not to mention low performance in professional activities, which reflects on the results and prestige of the university. Teachers, as well as the students, consider that another aspect that needs to be improved is the access for persons with disabilities.

The section about work satisfaction and professional development offers both good and bad news. On one hand, most professors are satisfied with opportunities offered to develop their careers and the status offered by being an employee of the University POLITEHNICA of Bucharest; they are also content with the results of their work, with respect, appreciation and feedback received from students, and with the work-leisure balance. This is good news, as all these aspects lead to high quality of life, self-esteem, and stimulate people to continue working in order to improve their performance. On the other hand, many professors do not feel the university provides them enough support to improve their professional activities, by granting financial support to take part in training sessions, conferences, and technical endowments for experiments. A medium level of satisfaction is observed regarding the financial and nonfinancial benefits offered by the university to its employees, Also, a great number of them (more than 16%) believe that there are no equal opportunities to obtain additional gains. This aspect needs to be improved, as people who feel discriminated do not feel stimulated to continue performing. Another aspect that needs improvement is that professors feel that research activities are over weighted in the criteria for professional promotion; this aspect needs to be commonly addressed by the University POLITEHNICA, the other Romanian universities and the Ministry of Education. Lastly, but not less important, almost half of the professors (42.5%) would leave the university, half of them for other types of activities, half, in order to work in other universities; besides these 42.5%, another 10% would leave the university because of other reasons. This is another alarming aspect that requires a deeper analysis. Human capital is the essential asset of an educational institution, and the fact that so many employees would leave is a signal that there are essential changes that need to be done, in order to improve work satisfaction and quality of life.

Regarding different practical aspects, there are things that professors are very satisfied with, and other that need improvement, in order to increase their quality of life. For example, professors appreciate the quality of the access roads and alleys, and the green spaces in the campus, but they would like to have more opportunities to practice sports. They also think that urban furniture is not enough, and would like to improve the possibilities for spending leisure time in campus. Also, they consider that a pharmacy and special medical services should be available in campus. As this was a concern also expressed by students, it is clear that offering this type of services in campus will determine higher levels of satisfaction to all the stakeholders. Regarding food products, professors are more careful with their meals, that is why they are not pleased with food variety offered in the shops in campus, but they do appreciate food at the canteen, and also the prices there; the only thing that would improve their satisfaction is to improve the queuing time. Another important aspect is that professors are happy with the quality of the teaching aids and materials, and also with the spaces they work in (lecture halls, classrooms, laboratories). They also appreciate scientific databases and libraries they have access to. Both these facts are gratifying, because being happy with the material endowment to perform one's job tasks reduces the reasons to suffer from burnout and increases the general quality of life.

The last section shows that the general level of satisfaction and the way their work is rewarded is the most influencing aspect for the lives of the majority of professors. As questions on this topic showed the need for some changes, it is clear that in order to improve the quality of life in the University POLITEHNICA of Bucharest the management needs to increase the support for professional improvement, the benefits professors receive, and also the way to access additional benefits.

Also, most of the professors consider that the questionnaire they filled in assesses all the important aspects that influence their professional lives. The comments they made in the last section usually express opinions about aspects that need improvement, like cleanliness, especially of the bathrooms, or criteria for promotion. All these will be presented, with some proposed solutions, in a different paper, which concludes our research on the perceived quality of life in the University POLITEHNICA of Bucharest.

#### 4.2 The Index

When constructing the quality of life index it is aimed at obtaining a unique number that would capture the level of satisfaction perceived by professors working in the University POLITEHNICA of Bucharest. The index has values between 1 and 5 where 1 equals total dissatisfaction and 5 total satisfaction.

In order to obtain the required result, the first step was to calculate an average score for each section of the questionnaire. Each question in the section has the same weight as we cannot assign different level of importance for individual questions. The results are shown in Table 1.

It is easy to see that all categories scored well above 3, with the highest score close to 4, which indicates a high level of satisfaction among professors. The best scoring category was that of safety and human rights with a score of 3.83 while the lowest score was obtained by the practical aspects of life in campus category.

The second step taken was to calculate weights for each category by using the rankings of the categories and the grades that respondents were asked to assign to each section at the end of the questionnaire. The weights for each section are shown in Table 2.

**Table 1** Scores for each category of factors influencing the quality of life of professors

Category of factors	Score
Satisfaction at university level	3.159
Satisfaction at faculty level	3.254
Satisfaction at department level	3.731
Safety and human dignity	3.831
Work satisfaction and professional opportunities	3.278
Other practical aspects of life in campus	3.093

Source: Calculations made with data gathered from the answers to the questionnaire

Category of factors	Weight (%)
Satisfaction at university level	15.87
Satisfaction at faculty level	16.26
Satisfaction at department level	17.23
Safety and human dignity	16.72
Work satisfaction and professional opportunities	17.62
Other practical aspects of life in campus	16.30

**Table 2** Weights for each category of factors influencing the quality of life of professors

Source: Calculations made with data gathered from the answers to the questionnaire

After that, it has been used the formula presented in the methodology section to calculate the final value of the index.

$$I_{QoLP} = 0.1587 \times 3.159 + 0.1626 \times 3.254 + 0.1723 \times 3.731 + 0.1672 \times 3.831 + 0.1762 \times 3.278 + 0.1630 \times 3.093$$

$$= 3.395$$
(2)

The final value of 3.395 represents the overall satisfaction as it is perceived by professors regarding the quality of life in campus. When compared with the maximum possible value of 5 we can say that the level of satisfaction among professors in fairly high. As it is the first time this index is calculated, other comparisons are not possible. We consider that it would be useful, after a certain period of time, to apply again the questionnaire, and see if there are any changes.

#### 5 Conclusions

Studies show that professional performance of professors is influenced by the general climate in the university campus, prestige of the university, physical conditions for research and teaching, professional opportunities they have, and wages and other financial benefits they receive. Taking all these into consideration, we have asked professors from the University POLITEHNICA of Bucharest to fill in a self-administered questionnaire, in order to assess their perceived quality of life in campus, and to determine a Quality of Life in Campus Index for the teachers of this university.

Overall, professors are quite satisfied with their work conditions and environment, but there definitely serious problems that need to be addressed, like decision making process, violence and discrimination, criteria for promotion, and benefits offered to staff. The calculated index for professors shows a fairly high level of satisfaction (3.395), which means that the perceived quality of life is good, but there are certain aspects which can be improved.

The last step of our study will be to determine the general index of quality of life in the university campus and to rank the aspects that need improvement; also, we will offer some suggestions of measures to increase the quality of life in campus.

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### **Appendix**

#### Questionnaire About Quality of Life in UPB: Professors

Hello! We are professors from the Department of Economy of UPB and we will perform a study about the quality of life in the UPB campus, from both the professors and the students' perspective. We ask you to help us with our inquiry by filling in this questionnaire. Thank you.

#### University POLITEHNICA of Bucharest

- 1. On a scale from 1 to 5, how pleased are you with the ranking/prestige of UPB in Romania?
  - 1 Very Unpleased—5 Very Pleased
- 2. On a scale from 1 to 5 how do you appreciate the general development path of UPB?
  - 1 It is totally wrong—5 It is very correct
- 3. On a scale of 1–5 how pleased are you with working in UPB?
  - 1 Very Unpleased—5 Very Pleased
- 4. On a scale of 1–5 how involved are you in the decision making process in UPB?

  1 Not involved at all—5 Fully involved
- 5. On a scale of 1–5 how are your aspirations satisfied in UPB?
  - 1 They are not satisfied at all—5 They are fully satisfied
- 6. On a scale of 1–5 evaluate to what extent is the University represented in the media and in public?
  - 1 Totally insufficient—5 It is represented adequately

#### The Faculty You Belong to

- 1. On a scale of 1–5 how involved are you in the decision making process in your faculty?
  - 1 Not involved at all—5 Fully involved
- 2. On a scale of 1–5, do you appreciate that everyone (including you) has equal chances to take part in the faculty's activities?
  - 1 There are no equal chances—5 Everyone has equal chances

3. On a scale of 1–5, do you appreciate that everyone (including you) has equal chances to promotion at the faculty level?

1 There are no equal chances—5 Everyone has equal chances

4. On a scale of 1–5, how much do you feel supported by your colleagues when you suggest a project?

1 Not at all—5 We are a united team and we support each other

- 5. On a scale of 1–5, how do you appreciate communication at faculty level do you receive complete information?
  - 1 I never receive complete information—5 I always receive complete information
- 6. On a scale of 1–5, how do you appreciate communication at faculty level do you receive relevant information on time?
  - 1 I never receive relevant information on time—5 I always receive relevant information on time
- 7. On a scale of 1–5, how do you appreciate the availability of the faculty management do they listen to the problems you raise?
  - 1 I can never communicate with the faculty management—5 I have an open communication with the faculty management
- 8. On a scale of 1–5, how do you appreciate the clarity of the faculty management's objectives regarding its development?

1 There are no clear objectives—5 All objectives are clear

- 9. On a scale of 1–5, how much does the faculty management encourage individual and group performance?
  - 1 Not at all—5 Very much
- 10. On a scale of 1–5, to what extent do you appreciate that the faculty management encourages you to express your ideas?

1 Not at all—5 Very much

#### The Department You Belong to

- 1. On a scale of 1–5, how pleased are you with the team you are working with in your department?
  - 1 Very Unpleased—5 Very Pleased
- 2. On a scale of 1–5 how involved are you in the decision making process in your department?
  - 1 Not involved at all—5 Fully involved
- 3. On a scale of 1–5, do you appreciate that everyone (including you) has equal chances to take part in the department's activities?
  - 1 There are no equal chances—5 Everyone has equal chances
- 4. On a scale of 1–5, do you appreciate that everyone (including you) has equal chances to promotion at the department level?
  - 1 There are no equal chances—5 Everyone has equal chances
- 5. On a scale of 1–5, how much do you feel supported by your colleagues when you suggest a project?
  - 1 Not at all—5 We are a united team and we support each other

- 6. On a scale of 1–5, how do you appreciate communication at department level do you receive complete information?
  - 1 I never receive complete information—5 I always receive complete information
- 7. On a scale of 1–5, how do you appreciate communication at department level do you receive relevant information on time?
  - 1 I never receive relevant information on time—5 I always receive relevant information on time
- 8. On a scale of 1–5, how do you appreciate the availability of the department management do they listen to the problems you raise?
  - 1 I can never communicate with the department management—5 I have an open communication with the department management
- 9. On a scale of 1–5, how do you appreciate the clarity of the head of department objectives regarding its development?
  - 1 There are no clear objectives—5 All objectives are clear
- 10. On a scale of 1–5, how much does the head of department encourage individual and group performance?
  - 1 Not at all—5 Very much
- 11. On a scale of 1–5, to what extent do you appreciate that the head of department encourages you to express your ideas?
  - 1 Not at all—5 Very much

#### Safety and Human Dignity

- 1. On a scale from 1 to 5, how safe do you feel in the UPB campus?
  - 1 Very unsafe—5 Very safe
- 2. On a scale from 1 to 5, how would you rate the number of security and police agents found in the UPB campus?
  - 1 Insufficient—5 Very adequate
- 3. On a scale from 1 to 5, how prepared to deal with dangerous situations do you find the security and police agents found in the UPB campus are?
  - 1 Very unprepared—5 Very prepared
- 4. On a scale from 1 to 5, how satisfied are you with the public lighting in the UPB campus?
  - 1 Very unsatisfied—5 Very satisfied
- 5. On a scale from 1 to 5, how satisfied are you with work related safety measures taken in the UPB campus?
  - 1 Very unsatisfied—5 Very satisfied
- 6. Have you ever witnessed one or more cases of discrimination of a person in the UPB campus, regarding race, religion, sex, age etc.?

Yes/No

7. Have you ever been a victim of discrimination in the UPB campus, regarding your race, religion, sex, age, etc.?

Yes/No

8. Have you ever witnessed one or more cases of physical violence towards a person in the UPB campus?

Yes/No

9. Have you ever been the victim of physical violence in the UPB campus? Yes/No

10. Have you ever witnessed one or more cases of psychological violence towards a person in the UPB campus?

Yes/No

- 11. Have you ever been a victim of psychological violence in the UPB campus? Yes/No
- 12. On a scale from 1 to 5, how would you assess the ease of access of disabled persons in the UPB campus?

1 Impossible—5 Very easy

#### Work Satisfaction and Professional Opportunities

- On a scale of 1–5 evaluate opportunities for professional development in UPB?
   There are no opportunities for development—5 There are many opportunities for development
- 2. On a scale of 1–5, how do you evaluate the support offered by the university for professional development?

1 Non-existent support—5 Great support

- 3. On a scale of 1–5, how do you evaluate the visibility offered by the university?

  1 The university doesn't offer any visibility—5 The university offers me all the visibility I need
- 4. On a scale of 1–5, how do you evaluate the status and credibility offered by the university?
  - 1 I avoid mentioning I am professor in UPB—5 I enjoy many benefits by associating myself with UPB
- 5. On a scale of 1–5, how do you evaluate your salary level?

1 Totally unsatisfying—5 Great

- 6. On a scale of 1–5, how do you evaluate the possibility to obtain additional earnings?
  - 1 There are no opportunities to obtain additional earnings—5 There are many opportunities to obtain additional earnings
- 7. On a scale of 1–5, how do you evaluate the possibility to obtain benefits otherwise than salaries? (places in resorts during holidays, subsidized prices for canteen meals, accommodation, nursery and kindergarten for children etc.)
  - 1 There are no opportunities to obtain other benefits—5 There are many opportunities to obtain benefits otherwise than salaries
- 8. On a scale of 1–5, how do you evaluate the chances to accede to activities providing additional earnings?
  - 1 There are no equal chances—5 Everyone has equal chances
- 9. On a scale of 1–5, how do you evaluate the purpose of your work?
  - 1 My work has no purpose—5 My work has always a purpose

10. On a scale of 1–5, how do you evaluate the satisfaction you fell regarding your work?

1 My work is not satisfying at all—5 My work brings me great satisfaction

- 11. On a scale of 1–5, how pleased are you with your work-leisure balance?
  - 1 Very unpleased—5 Very pleased
- 12. On a scale of 1–5, how do you evaluate the negative impact of your work in UPB on your health?

1 There is a great negative influence—5 There is no negative influence

- 13. On a scale of 1–5, how do you evaluate the feedback you receive from students?

  1 It is completely useless for me—5 It is extremely useful for me
- 14. On a scale of 1–5, how do you evaluate the respect you enjoy for your work and activity?

1 I am not respected—5 I receive great respect

- 15. Have you ever thought of leaving UPB? Yes, for a job in a different field/Yes, for a job in a different university/research institute/I don't know/Yes, because of other reasons/No
- 16. On a scale of 1–5, how do you evaluate the research activity in the university?

  1 Very unsatisfying—5 Great
- 17. On a scale of 1–5, how do you evaluate the positive impact of research activities on the teaching activities?

1 There is no positive impact—5 There is a great positive impact

- 18. On a scale of 1–5, how do you evaluate the general research-oriented climate?

  1 Very unsatisfying—5 Very satisfying
- 19. On a scale of 1–5, how often do you take part in scientific research projects?

  1 Never—5 Very often
- 20. On a scale of 1–5, how much do you want to be involved in scientific research projects?

1 Never involved—5 Always involved

21. On a scale of 1–5, how do you evaluate the importance of criteria regarding scientific research for promotion?

1 There is too much importance of research for teaching positions—5 The importance of research is adequate for teaching positions

#### Other Practical Aspects

1. On a scale of 1–5, how do you evaluate the distance you go through daily to reach to UPB?

1 Very long—5 Acceptable

2. On a scale of 1–5, how do you evaluate the time needed for travelling to and from work?

1 I spend too much time travelling—5 Acceptable

- 3. Do you consider there are enough parking places in campus? No/I don't know/Yes
- 4. On a scale of 1–5, how do you evaluate the distance you walk from the means of transportation to UPB?

1 Very long, a mean of transportation is needed in campus—5 Acceptable

5. On a scale of 1–5, how do you evaluate the quality of roads and alleys in UPB campus?

1 Very bad—5 Great

6. When you have classes in different buildings, how do you evaluate the time and possibilities to cover the distances between buildings, on a 1–5 scale?

1 Distances are too long to be covered during one break—5 Distances are not an issue

7. On a scale of 1–5, how do you evaluate the possibility to practice sports in the university?

1 For professors, there are no possibilities to practice sports – 5 For professors, there are many possibilities to practice sports

8. Do you consider that green spaces are important for the quality of life in campus?

No/I don't know/Yes

9. Do you consider that the existent green spaces are sufficient?

No/I don't know/Yes

10. On a scale from 1 to 5, how well taken care of are the green spaces within the UPB campus?

1 Neglected—5 Very well taken care off

- 11. Do you consider that urban furniture present in the UPB campus is sufficient?

  No/I don't know/Yes
- 12. On a scale from 1 to 5, how satisfied are you with the quality (ergonomic, comfort) of the urban furniture within the UPB campus?

1 Very unsatisfied—5 Very satisfied

- 13. Do you consider that the number of trash bins in the UPB campus is sufficient? No/I don't know/Yes
- 14. On a scale from 1 to 5, how satisfied are you with the cultural and recreational opportunities on campus?

1 Very unsatisfied—5 Very satisfied

15. On a scale from 1 to 5, how satisfied are you with the quality of the teaching means you are provided with?

1 Very unsatisfied—5 Very satisfied

16. On a scale from 1 to 5, how satisfied are you with the way lecture halls, classrooms, the library and the laboratories look?

1 Very unsatisfied—5 Very satisfied

17. On a scale from 1 to 5, how satisfied are you with the library and databases provided by UPB?

1 Very unsatisfied—5 Very satisfied

18. On a scale from 1 to 5, how do you evaluate the accommodation conditions provided by UPB to its professors?

1 Very inadequate—5 Excellent

19. Within the UPB campus there are no pharmacies in the area where teaching/educational activities are held. On a scale from 1 to 5, how would you assess this matter?

1 It is a very serious problem—5 It is not a problem at all

20. On a scale from 1 to 5, how necessary would you consider to be the existence of spaces offering specialized medical services within the UPB campus (near the buildings destined for teaching/educational activities)?

1 Unnecessary—5 Very necessary

21. On a scale from 1 to 5, how satisfied are you with the medical services provided in the UPB campus?

1 Very unsatisfied—5 Very satisfied

22. On a scale from 1 to 5, how would you asses the variety of food provided by the existent shops within the area where teaching/educational activities are held?

1 Not at all varied—5 Very varied

23. On a scale from 1 to 5, how satisfied are you with the prices from the existent shops within the area where teaching/educational activities are held?

1 Very unsatisfied—5 Very satisfied

24. On a scale from 1 to 5, how satisfied are you with the food quality from the UPB campus cantinas?

1 Very unsatisfied—5 Very satisfied

25. On a scale from 1 to 5, how satisfied are you with the prices from the UPB campus cantinas?

1 Very unsatisfied—5 Very satisfied

26. On a scale from 1 to 5, how would you rate the time you spend in line at the campus cantinas?

1 Too much time spent in line—5 Very little time spent in line

#### Conclusions

1. Please grade the following sections from 1 to 10, regarding the impact and influence they have on your lives (1—low impact and importance; 10—high influence and importance)

The university you work for

The faculty where you work

The department you belong to

Safety and human dignity in campus

Work satisfaction and professional opportunities

General atmosphere, material endowment, goods and services offered in campus

2. Do you consider that there are other relevant criteria to assess the quality of life in campus that this questionnaire did not include? Please specify which.

Please also fill the following data, necessary for the statistical processing:

1. Age

25--34 years old/35\text{--}44 years old/45\text{--}54 years old/55\text{--}64 years old/over 65 years old

2. Marital status

Not married/Married/Other: . . .

#### 3. Teaching degree

Teaching assistant/Lecturer/Senior lecturer/Professor

#### 4. Position

Pro-rector/Dean/Head of department/Professor with no management position

Thank you for taking time out to participate in our survey. We truly value the information you have provided.

#### References

- Bakker, A. P., & Costa, P. (2014). Chronic job burnout and daily functioning: A theoretical analysis. *Burnout Research*, 1(3), 1–8.
- Collie, R. J., & Martin, A. J. (2017). Adaptive and maladaptive work-related motivation among teachers: A person-centered examination and links with well-being. *Teaching and Teacher Education*, 64, 199–210.
- Dumitrescu, C. I., Leuştean, B., Lie, I. R., Dobrescu, R. M., & Vulturescu, V. (2017a). Quality of life in a university campus: Identification of the main determinants which can influence it. In Proceedings of the 29th International Business Information Management Association Conference (pp. 466–473).
- Dumitrescu, C. I., Leuştean, B., Lie, I. R., Dobrescu, R. M., & Vulturescu, V. (2017b). Quality of life in university POLITEHNICA of Bucharest campus: Students' perception. In Proceedings of the 29th International Business Information Management Association Conference (pp. 863–875).
- García, M. M., Iglesias, S., Saleta, M., & Romay, J. (2016). Riesgos psicosociales en el profesorado de enseñanza universitaria: Diagnóstico y prevención. *Journal of Work and Organizational Psychology*, 32, 173–182.
- Lie, I. R., Dumitrescu, C. I., & Dobrescu, R. M. (2014). Job burnout in Romania: Causes, consequences and solutions. A managerial perspective. In Proceedings of the 24th International Business Information Management Association Conference (pp. 591–597).
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2, 99–113.
- Patlán Pérez, J. (2013). Efecto del burnout y la sobrecarga en la calidad de Vida en el trabajo [Effect of the burnout and overload on the quality of life at work]. *Estudios Gerenciales*, 29, 445–455.
- Polacow-Korn, G., De Lima Pontes, A. A., Abranches, D., & De Lima Pontes, P. A. (2015). Hoarseness and risk factors in university teachers. *Journal of Voice*, 29(4), 518.e21–518.e28.
- Wallace, D. D., Boynton, M. H., & Lytle, L. A. (2017). Multilevel analysis exploring the links between stress, depression, and sleep problems among two-year college students. *Journal of American College Health*, 65(3), 187–196.

# Trust and Cooperation Between Companies and Public Administration Institutions in Poland



Urszula Kobylińska

**Abstract** The aim of this article is to determine the level of cooperation and trust between Polish enterprises and public institutions both governmental and selfgovernment ones. In particular, the factors that most affect the companies' low trust in the public sector are analyzed and how the changes in various factors may improve this trust in the future. The critical analysis of literature and statistical analysis of the results of the survey carried out in 381 Polish companies with their headquarters in the Podlaskie Province (Poland) were used in this article. Spearman's correlations ranks were used as a part of the statistical analysis to determine the dependency of the level of trust on cooperation between companies and public institutions. The study found a fairly low level of companies' trust in public administration institutions in Poland. The existing level of cooperation with these institutions was assessed very low by the respondents. In particular, the respondents indicated the low level of trust and cooperation with government institutions. Among the factors affecting the existing cooperation between enterprises and public institutions the ones assessed lowest were: the offer prepared by the administration, the image of administration and previous experience of cooperation.

**Keywords** Trust · Cooperation · Public administration institutions · Poland

#### 1 Introduction

Companies operating in the contemporary environment, competing for limited resources can more effectively achieve their goals by working with organizations outside the commercial sector such as for example universities, business environment institutions or public administration organizations. In recent years the partnership between the private and public sectors in terms of implementing public tasks has been instrumental in a number of countries including the United States, Great

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Britain, Germany, France and Italy (Dobrowolski 2014). Polish experience in the field of cooperation between the two sectors has been scarce although the legal basis defining its principles appeared more than 10 years ago (the first public-private partnership law was passed in Poland in 2005). The necessary condition for public-private interaction is in particular the trust between a private entity and its public partner. It determines the willingness of stakeholders to cooperate and willingness to share risk. Public actors should create public trust through their activities. In the future it may become the basis for better cooperation with the commercial sector in implementation of public tasks. The public sector must ensure transparency of activities, assess joint actions not only through the prism of the economy, but also from the point of view of the public interest and accountability of decision-makers for decision-making. The indicated factors are sine qua non conditions of creating inter-organizational trust and intensified cooperation of both sectors.

The issue of trust and cooperation between organizations has recently been considered from many points of view, in the perspective of one organization and workers employed in it as well as organizations trusting one another. Ansell and Gash (2008), Gray and Stites (2013), Sloan and Oliver (2013) have noticed that the lowered trust between partners reduces possibilities of implementing common objectives and the restoration of confidence requires a long time.

Researchers discuss the issues of trust and cooperation of companies with public institutions more and more frequently since many innovative projects require cooperation between business, science and administration. The tendency to bestow trust in public institutions by entities from the commercial sector is an individual feature (some are more trusting, others more suspicious), but it also depends to a large extent on previous experiences with such cooperation.

The aim of this article is to determine the level of cooperation and trust between Polish companies and public institutions of both central and local government. In particular the following aspects were analyzed: what factors have the greatest impact on the low trust of companies in the public sector and how do positive changes in particular factors can improve their trust in the future. Critical literary analysis and statistical analysis of research conducted among 381 Polish companies based in the Podlaskie Province (Poland) have been used in this paper. Spearman's rank correlations have been used in the statistical analysis to determine the relationship between the level of companies' trust in public administration institutions, cooperation with them and the potential for its strengthening in the future.

# 2 Trust and Cooperation in Theory

For many years the subject of trust has been researched by authors representing various scientific disciplines such as: management, economics, sociology, administration science and psychology. Trust can be seen from many perspectives: at macro level (e.g. general trust in the context of economic growth) (Beugelsdijk et al. 2004), mezo (trust in organizations, inter-organizational trust) (Zaheer et al. 1998; Currall

and Inkpen 2002) and micro at individual level (Bigley and Pearce 1998; Kramer and Tyler 1996).

In management science the trust is discussed inter alia as (Lewicka et al. 2016):

- interpersonal trust between superiors and subordinates and between co-workers within the organization,
- institutional internal trust of employees in the organization,
- trust in inter-organizational relationships;
- in marketing, customers' trust in the organization, also for online shopping.

Mayer et al. (1995) claim there are some key factors that build trust: the perception of partner's competence based on his or her knowledge, experience and certifications; the assessment of partner's success, kindness (loyalty, fairness) and honesty (following the principles, keeping the commitments). It is noteworthy that all these factors affect trust in inter-organizational relationships, but friendliness applies to personal relationships only and the other factors shape impersonal relationships.

Most researchers also claim that trust is gradual and grows over time. At the beginning there is a stage of trust development (trustworthiness estimation), then trust is based on knowledge (when assumptions turn into positive expectations related to the partner) and finally there is relational trust which reflects the relationship quality (Lewicki and Bunker 1996).

Researchers also point to the relationship between GDP and development of trust, and emphasize that countries with a high GDP show a higher level of trust in general (Durlauf and Fafchamps 2004; Zak and Knack 2001; Beugelsdijk et al. 2004; Knack and Keefer 1997; Steijn and Lancee 2011; Algan and Cahuc 2010).

Therefore, trust is a diverse and multidimensional construct, dynamic and changing over time, depending on the level of development and wealth of the nation. It is shaped on the basis of the history of mutual contacts. It seems to be a resource that grows with the intensity of its use and weakens if it is not used. An essential feature of trust is its graduality, which allows the possibility to develop trust in time but also its return to a lower level in mutual relations (Atkinson and Butcher 2003). Multitude of definitions of trust and measurement models makes it difficult to compare the results of work by different authors. Such a state of affairs also points to the limits in regard to the tools available to measure trust. The difficulty in studying trust also arises due to dealing with a phenomenon that is not factual, but felt or perceived only (DeVellis 1991).

Lewicki et al. (1998) define trust in the context of inter-organizational cooperation and perceive it in categories of some positive expectations related to the partner's behavior, while they perceive distrust as certain negative expectations about the conduct of the other party. Trust is undoubtedly a prerequisite for initiating cooperation between organizations. Increasingly promoted in the literature as a prerequisite for initiating joint projects the model of cooperation between companies and institutions outside the sector requires elimination of the phenomena that threaten trust building (for example corruption, lack of clear administrative procedures, poor image of administration institutions). There are three basic factors that

make an entity credible and thus affect trust in it and willingness to cooperate with it. These are: (1) ability to carry out specific activities; (2) kindness that entails acting in the best interests of the party and (3) honesty that results from the consequences and observance of certain principles (Sankowska 2012).

Trust is a factor that stabilizes the organization's functioning over a long period of time and build reputation (Wierzbiński and Potocki 2012). In terms of establishing cooperation between companies it is actually one of its foundations. Relationships between companies based on cooperation and trust give a better chance for success. Trust between partners can exist only if there is mutual certainty that the benefits of cooperation between companies outweigh the benefits that these companies could achieve by acting on their own. Trust between partners contributes to sharing key information, reduces opportunism and accelerates cooperation between them (Wasiluk 2013).

It is said that the need to achieve organizational goals in a turbulent environment is the cause of inter-organizational cooperation generation. Researchers note that organizations work together because of the lack of specific resources they cannot get at the specific time and place (Selsky and Parker 2005) and also to gain a competitive advantage. Disturbance in relationships based on trust and credibility do not allow for the full benefit of cooperation, including inter-organizational and cross-sectoral cooperation. Today functioning and development of organizations in each sector increasingly depends not only on them but also on their relationship with the environment. Among the determinants of organizational development and innovation growth trust is identified as a key pillar of partnership and cooperation (Surówka-Marszałek 2010).

In modern public management, two distinct tendencies are noticeable. The first is to give up repetition and multiplication of activities and follow the instructions to focus on creativity and effectiveness in problem-solving. The second is to create partnership relationships not only within the public sector but also cooperation with other sectors, including the commercial sector. A motive that is the reason for collaboration is necessary to establish cooperation between organizations. The mutual benefits achieved through cooperation contribute to the creation of a certain level of trust between the parties, which then translates into a degree of engagement that is an important factor influencing co-operation. It is difficult to say clearly which is the cause and which is the consequence and whether the low level of trust is the result of lack of cooperation or the lack of cooperation is the result of low trust in potential partners.

# 3 Methodology

The aim of this article is to present the selected results of the study conducted to determine the level of trust as well as the degree of cooperation between companies in Podlaskie Province (Poland) and public institutions of both central and local government and willingness to strengthen it. The study was carried out as part of

an international research project "Business Readiness for Cross-border Networking" implemented under an agreement between the Polish Academy of Sciences and the Belarusian State Academy of Sciences in the years 2014–2016.

Respondents were asked, inter alia, to assess their level of trust in institutions of central and local government taking into account such variables as: corruption among officials, cooperation offers prepared for companies, information on the results of administration activities, existing administrative procedures, image of administration in society, political influences in offices. The studied companies assessed also the level of cooperation with local and central authorities (Likert scale 1–7). In terms of the area of companies' cooperation with public administration institutions (of central and local government) the following variables were assessed: transparency of administration activities, financial and organizational support for entrepreneurship development, cooperation offer prepared by administration, level of fiscal and organizational barriers to start-up a business, level of corruption, image of administration in society, previous experience of cooperation. Respondents assessed not only how much each factor influences the level of cooperation, but also to what extent the positive changes in the various factors could influence improving the level of cooperation in the future (Likert scale 1–7).

The above-mentioned factors determining the level of trust and cooperation between companies and public administration institutions were selected on the basis of critical analysis of the literature and discussions with representatives of business and academic environment.

The method of a survey was used for collecting primary information, partial results of which are presented in this article. The following statistical measures were used to interpret the study results: scattering measures—coefficient of variation (V) and measures of central tendency—mean ( $\bar{x}$ ), median (Me), dominant (D), as well as standard deviation (s). Spearman's rank correlations were used for statistical analysis to determine the relationship between the level of companies' trust in the public sector, their cooperation and possibilities for its future strengthening.

# 4 Discussion on the Study Results

The main aim of the article is to assess the level of trust and cooperation between companies in Podlaskie Province and public administration institutions. The studied companies were asked to assess their level of trust to administration institutions of both central and local government and to evaluate their cooperation with the indicated entities (Table 1). Respondents rated very low both trust and cooperation with institutions outside the sector. In particular, the low level of cooperation

<sup>&</sup>lt;sup>1</sup>Representatives of companies (management staff) from both Polish and Belarusian side participated in the complex study. This article focuses on the research results on Polish enterprises only (the research sample included 381 entities).

**Table 1** Trust and cooperation between the studied companies and administration institutions (central and local government), (N = 381)

Specification Mean Median Dominant The size of the dominant range deviation of variation Level of trust  (a) Central government institutions  (b) Local government institutions  The size of the dominant range deviation of variation of varia
Level of trust  (a) Central government institutions  (b) Local govern- 3.38 3.00 4 122 1.26 37.29
(a) Central government institutions   2.89   3.00   3   150   1.18   40.93   4
government institutions
institutions
(b) Local govern- 3.38 3.00 4 122 1.26 37.29
(0) = 0.00   0.00
ment institutions
ment institutions
Level of cooperation
(a) Central gov- 2.34 2 1 153 1.48 63.2
ernment
institutions
(b) Local govern- 3.29 3 4 91 1.53 46.2
ment institutions
The degree of interest in strengthening cooperation in the next 2-3 years
(a) Central gov- 2.92   3   1   101   1.66   56.93
ernment
institutions
(b) Local govern- 3.75   4   4   91   1.75   46.77
ment institutions
Correlation of Spearman's rank (p $< 0.05$ )
Assessment of the level of trust and cooperation
(a) Central government 0.331
(b) Local government 0.735
Assessment of the current level of cooperation and possibilities of its strengthening in future
(a) Central government 0.638
(b) Local government 0.615

Source: own studies

(2.34) and therefore trust (2.89) was assessed in relation to central government organizations. Taking into account the respondents' attitudes on the studied issues it should be noted that the indications did not exceed 4.0 (1–7 scale), even to the question of future cooperation (average indication 3.75). Such a situation may constitute the evidence of constantly low trust and weak relations of these two worlds in Poland: business and administration. In general, respondents rated higher their cooperation with local government than central government, which is in line with conducted in Poland public opinion surveys regarding confidence in public institutions (Public Opinion Research Center 2016). The regional scale research results discussed in this paper correspond to the results of nationwide studies which show that Poles trust less the central government than local authorities (of cities or municipalities). A positive quite strong correlation was also found in respondents' ratings by means of Spearman's rank correlations in the case of assessments of the

level of trust and companies' cooperation with local government institutions. Those companies that showed a higher level of trust in local administration institutions assessed higher also the level of cooperation with these organizations, which may be confirmed by the fact that greater trust encourages greater inter-organizational cooperation.

Considering the current level of companies' cooperation with public administration institutions and the desire to strengthen this cooperation in the future it turned out that companies would restrainedly like to cooperate more closely in subsequent years (Spearman's rank correlation of 0.6). Such situation may be due to the still too little awareness of officials about the impact of enterprises on economic development of the city or municipality and initiation of projects for cooperation. Mutual unwillingness to undertake joint activities means that potential partners not only have limited knowledge of each other problems and limitations, but also of possible scenarios for collaboration. The dialogue in this case is possible if it is substantive and essential. The mode of communication should be open and based on mutual trust. This is a lack of goodwill, initiative and willingness to talk that constitutes the most limiting factor in building a common communication platform between business and administration.

On the basis of literature analysis a list of factors influencing the level of companies' trust to public institutions has been identified. Among the factors mentioned are the following variables: corruption among officials, cooperation offer prepared for enterprises, information on the effects of administration activities, existing administrative procedures, image of administration in society and political influences at the office (Table 2).

Most respondents for the majority of variables gave similar answers oscillating around 4.0. The highest rating was assessed to: offer of cooperation prepared for enterprises by local government institutions (average rating 4.44), which is in principle in line with the theory that trust is based on experiences of existing cooperation, which should first be proposed and then implemented with the interested parties (companies). Local authorities have far more potential than government institutions to initiate cooperation and involve companies in various projects, such as joint local projects, outsourcing public or private tasks, joint development of strategic documents, initiating clusters in the region, etc. The other higher rated variable influencing the level of trust in local government institutions was: the existing administrative procedures (average rating 4.26). Undoubtedly, transparent and simple administrative procedures can greatly increase the trust of companies in administration institutions. For many years entrepreneurs have claimed that running a business in Poland is not easy due to intricate administrative procedures, inconsistent tax system and high non-wage labor costs. In this area however, the central administration institutions have the most to say due to their competence to set the legislative process. Local administration operates basically on the basis of procedures developed at the governmental level.

The lowest influence on the companies' trust in administration institutions according to the respondents was the variation: political influences at the office (mean rating 2.9), which may be translated into the conclusion that the often

**Table 2** Assessment of the influence of individual factors on the current level of trust between businesses and central and local government institutions, N = 381

Factors influencing the current level of trust	Mean	Median	Dominant	The size of the dominant range	Standard deviation	Coefficient of variation
Corruption among off	ficials					
(a) Central government institutions	3.91	4.0	4.0	87	2.1	54.1
(b) Local govern- ment institutions	4.01	4.0	4.0	108	2.02	50.31
Offer of support and of	cooperati	on for enti	epreneurs			
(a) Central government institutions	4.31	5.0	5.0	101	1.74	40.37
(b) Local govern- ment institutions	4.44	5.0	5.0	108	1.64	37.07
Information about the	effects of	of administ	ration activit	ies		
(a) Central government institutions	3.62	3.0	3.0	150	1.50	41.44
(b) Local govern- ment institutions	3.74	3.0	3.0	139	1.47	39.4
Administrative proceed	lures					
(a) Central government institutions	4.12	4.0	3.0	102	1.70	41.2
(b) Local govern- ment institutions	4.26	4.0	3.0	98	1.67	39.3
Administration image	in socie	ty				
(a) Central government institutions	3.6	3.0	3.0	115	1.57	43.8
(b) Local govern- ment institutions	3.8	4.0	3.0	98	1.61	42.6
Political influences at	the offic	e				
(a) Central government institutions	3.6	3.0	3.0	109	1.62	45.4
(b) Local government institutions	2.9	3.0	4.0	112	2.11	73.3

emphasized politicization of public offices does not significantly influence the assessment of trust in administration. Trust is mainly based on personal experience of cooperation.

In addition, respondents once again gave higher ratings to variables related to local government, which may be due to the greater impact of local institutions on functioning of companies and their actual impact on possible cooperation. The studied companies were also expected to assess the impact of the listed factors on current cooperation with public administration institutions. The analysis of variables was selected on the basis of literature review and after consultation with business and science experts. Among the factors influencing the initiation of cooperation between

				The size of the		
				dominant	Standard	Coefficient
Factors	Mean	Median	Dominant	range	deviation	of variation
Transparency of admin-	3.09	3	1	105	1.82	59.13
istration activities (C/L)	3.45	3	1	75	1.85	53.56
Financial and organiza-	3.33	3	1	84	1.80	54
tional support for entre- preneurship development (C/L)	3.54	4	4	78	1.78	50.2
Cooperation offer pre-	2.99	3	1	116	1.82	60.72
pared by administration (C/L)	3.36	3	3	75	1.74	51.6
Level of fiscal and orga-	3.43	3	1	83	1.89	54.97
nizational barriers to start up a business (C/L)	3.64	4	3	81	1.78	48.97
Level of corruption (C/L)	3.02	3	1	140	2.03	67.07
	3.18	3	1	124	2.05	64.51
Administration image in	3.02	3	1	99	1.73	57.68
society (C/L)	3.40	3	3	81	1.77	52.2
Previous experience of	3.08	3	3	104	1.78	57.2
cooperation (C/L)	2.79	3	1	83	2.12	76

**Table 3** Assessment of the influence of individual factors on the current cooperation between businesses and central (C) or local (L) government institutions

sectors are the following: transparency of administration activities, financial and organizational support for entrepreneurship development, cooperation offer prepared by administration, level of organizational and fiscal barriers, level of corruption, previous experience of cooperation.

The respondents generally assessed lower all the variables influencing sector cooperation in relation to the variables of trust in administration institutions (Table 3). In principle, the median of responses for each variable did not exceed the mean of 4.0 (on a scale of 1–7), which may prove, for example, the lack of experience in undertaking such cross-sectoral cooperation. As in previous analyzes, the respondents rated slightly higher the variables influencing the level of cooperation with local administration institutions.

Relevant to the analysis of this part of the study was the answer to the question: How can positive changes in particular factors contribute to closer cooperation between companies and administration institutions in the future? In this part of the study respondents gave more optimistic answers. Among the most desirable changes the respondents indicated the following: financial and organizational support for entrepreneurship development (4.53), prepared cooperation offer (4.33), increased transparency of administrative activities (4.25). Lower ratings were for: previous experience of cooperation (3.01) and level of corruption (3.63). (See Table 4). In the

**Table 4** Assessment of the influence of positive changes in particular factors contributing closer cooperation between companies and central (C) and local (L) government institutions

Factors	Mean	Median	Dominant	The size of the dominant range	Standard deviation	Coefficient of variation
Transparency of admin-	4.09	4	6	64	1.92	46.95
istration activities (C/L)	4.25	4	7	67	1.98	46.61
Financial and organiza-	4.49	5	6	1.93	1.93	43
tional support for entre- preneurship development (C/L)	4.53	5	7	1.96	1.96	43.3
Cooperation offer pre-	4.25	4	5	72	1.91	45.05
pared by administration (C/L)	4.33	5	5	83	1.85	42.8
Level of fiscal and organizational barriers to start up a business (C/L)	4.31	4	6	72	1.93	44.8
	4.33	4	6	67	1.91	44.2
Level of corruption (C/L)	3.58	4	1	110	2.11	59
	3.63	4	1	101	2.13	58.5
Administration image in society (C/L)	3.76	4	3	76	1.85	49.12
	3.94	4	3	67	1.89	47.8
Previous experience of cooperation (C/L)	3.51	3	1	83	1.92	54.7
	3.01	3	0	33	2.28	75.9

case of most variables the respondents assessed higher the factors related to local administration institutions.

In analyses of the study results Spearman's rank correlations have been interpreted to assess the impact of each factor on the current level of cooperation and potential for its future strengthening as a result of positive changes in these factors (Table 5). The assessment of influence of each factor has shown a high correlation in the case of the following variations: transparency of administration activities, reduction of corruption, administration image in society and previous experience of cooperation (Spearman's rank correlation in the range of 0.6–0.8). The high correlations mainly concern the assessment of cooperation between companies and local administration institutions and the possibility of strengthening it in the future.

Concluding, selected results of research on trust and cooperation between companies and administration institutions in Poland it should be noted that mutual perceptions are slowly changing—officials and entrepreneurs are more and more aware of their mutual contribution to the country's development and strive to build cooperation on a partnership basis—however, there are still many unidentified areas of possible cooperation. Both business and government representatives pay attention to cognitive, system and communication obstacles and barriers (Giedrojć 2015). These obstacles exist on both sides and are the starting point for initiating the

**Table 5** Spearman's rank correlations for the assessment of the influence of each factor on the current level of cooperation and potential for its future strengthening as a result of positive changes in these factors

Correlation of Spearman's rank (p < 0.05)					
Transparency of administration activities					
(a) Central government institutions	0.600				
(a) Local government institutions	0.646				
Financial and organizational support for entrepreneurship deve	elopment				
(a) Central government institutions 0.4					
(b) Local government institutions	0.467				
Cooperation offer prepared by administration					
(a) Central government institutions	0.488				
(b) Local government institutions	0.432				
Level of fiscal and organizational barriers to start up a busines	ss				
(a) Central government institutions	0.472				
(b) Local government institutions	0.493				
Level of corruption					
(a) Central government institutions	0.555				
(b) Local government institutions	0.667				
Administration image in society					
(a) Central government institutions 0.503					
(b) Local government institutions 0.604					
Previous experience of cooperation					
(a) Central government institutions 0.61					
(b) Local government institutions 0.802					

necessary changes. The main areas of low trust and lack of cooperation between the two sectors, as indicated in this article, lead to a fundamental conclusion that the fight against stereotypes and dialogue builds on the effectiveness of cooperation. Of course, system barriers such as bad law, infrastructure limits, lack of funding cannot be ignored. However, the vast majority of recommendations relate to the fight against stereotypes, striving to exchange information, mutual support, and joint search for solutions, understanding and respect for the other side. Efforts to unlock the communication process and change attitudes are encouraged by the many positive experiences of existing forms of cooperation between sectors. On the part of entrepreneurs the employers' organizations should have a key role as they have the organizational and substantive background necessary in building a long-term relationship and are called for such a commitment.

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#### 5 Conclusion

The aim of the study presented in this paper was to identify the main factors affecting the level of trust and cooperation between enterprises and administration institutions and to show how positive changes in particular factors could lead to closer cooperation between actors in both sectors in the future. Conclusions were formulated on the basis of the results of questionnaire surveys carried out among companies from Podlaskie Province (Poland).

As the conclusions of the study, it should be emphasized that the studied companies indicate a fairly low level of trust in administration institutions. The respondents assessed the existing level of cooperation with these institutions very low. In particular, low trust and low level of cooperation with the central government institutions were reported by the respondents. The examined companies which indicated a higher level of cooperation with public institutions assessed better the possibility of strengthening it in the future.

Among the factors affecting current cooperation between enterprises and public institutions the lowest assessments were for the following variables: the offer prepared by administration, image of administration in Polish society, previous experience of cooperation. On the other hand in respondents' opinion positive changes in such factors as: financial and organizational support for companies from the administration could most likely improve cooperation among the sectors. Similarly, lower levels of fiscal and organizational barriers and also the offer of cooperation prepared by administration could increase the level of cooperation between enterprises and public institutions.

The assessment of the impact of each factor on the current level of cooperation and the potential for its future strengthening as a result of positive changes have shown a strong correlation in the case of such variables as: transparency of administration activities, lowering the corruption level, previous experience of cooperation (Spearman's rank correlation in the range of 0.6–0 8). The studied companies responded that the current level of confidence in public institutions is most influenced by: the offer of cooperation and support prepared for enterprises and administrative procedures. The political influences at the office were the least important. Positive changes in such factors as: administration support for entrepreneurship development, openness and transparency of activities, political neutrality of the authorities would most likely influence the improvement of the level of enterprises' trust in the public sector.

The above results show weaknesses and factors which particularly affect the existing level of companies' trust in administration institutions in the Podlaskie Province (Poland). They provide a platform for discussion between representatives of both sectors on possible actions and programs at central/local government level to promote cooperation and eliminate the low trust of companies in administration institutions.

It has now become evident that an increase in public sector rationality and some openness to the functioning of the private sector is a general civilization regularity

that will become a necessity in the years to come. Both the public administration (in terms of responsibility for the efficiency and effectiveness of public services and the development of civil society) and companies seeking financial and organizational support for effective reaching their goals can benefit from creating favorable, trust-based cooperation conditions. Therefore, any attempt to show the reasons for distrust between the sectors could serve better explanation of the low level of cooperation between companies and administrative institutions in Poland and development of solutions that improve relations between the parties.

#### References

- Algan, Y., & Cahuc, P. (2010). Inherited trust and growth. *American Economic Review*, 100(5), 2060–2092.
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571.
- Atkinson, S., & Butcher, D. (2003). Trust in managerial relationships. *Journal of Managerial Psychology*, 18(4), 282–304.
- Beugelsdijk, S., de Groot, L. F., & Anton van Schaik, B. T. M. (2004). Trust and economic growth: A robustness analysis. *Oxford Economic Papers*, *56*(1), 118–134.
- Bigley, A., & Pearce, J. L. (1998). Straining for shared meaning in organization science: Problems of trust and distrust. *Academy of Management Review*, 23(3), 405–421.
- CBOS. (2016). Zaufanie społeczne, raport z badań [Public trust. Research report] [PDF]. CBOS. Retrieved January 20, 2018, from http://www.cbos.pl/SPISKOM.POL/2016/K\_018\_16.PDF
- Currall, S. C., & Inkpen, A. C. (2002). A multilevel approach to trust in joint ventures. *Journal of International Business Studies*, 33(3), 479–495.
- DeVellis, R. F. (1991). Scale development: Theory and applications (2nd ed.). San Francisco, CA: Sage.
- Dobrowolski, Z. (2014). Zdolność organizacji publicznych do współdziałania publicznoprywatnego [The ability of public organizations to collaborate public-private]. *Zarządzanie Publiczne*, 2(26), 137–147.
- Durlauf, S. N., & Fafchamps, M. (2004). Social capital. In S. N. Durlauf & P. Aghion (Eds.), Handbook of economic growth. Amsterdam: Elsevier.
- Giedrojć, K. (2015). Efektywna współpraca administracji i biznesu. Rekomendacje działań [Effective cooperation between public administration and business. Recommended measures]. Studia BAS. 1, 29–49.
- Gray, B., & Stites, J. (2013). Sustainability through partnerships. Capitalizing on collaboration. In Network for business sustainability. State College, PA: Pennsylvania State University.
- Knack, S., & Keefer, P. (1997). Does social capital have an economic pay-off? A cross country investigation. *Quarterly Journal of Economics*, 112(4), 1251–1288.
- Kramer, R. M., & Tyler, T. R. (1996). Trust in organizations: Frontiers of theory and research. San Francisco, CA: Sage.
- Lewicka, D., Krot, K., & Książek, D. (2016). Metodyczne aspekty zaufania w naukach o zarządzaniu [Methodical aspects of trust in management science]. *Zeszyty Naukowe UE w Krakowie*, 7(955), 41–56.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. M. Kramer & T. Tyler (Eds.), *Trust in organizations. Frontiers of theory and research* (pp. 114–139). San Francisco, CA: Sage.
- Lewicki, R. J., Mc Allister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23(3), 438–458.

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Mayer, I., Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.

- Sankowska, A. (2012). Zaufanie organizacyjne a transfer wiedzy [Organizational trust and knowledge transfer]. *Przegląd Organizacji, 7*, 3–5.
- Selsky, J. W., & Parker, B. (2005). Cross-sector partnerships to address social issues: Challenges to theory and practice. *Journal of Management*, 31(6), 849–873.
- Sloan, P., & Oliver, D. (2013). Building trust in multi-stakeholder partnerships: Critical emotional incidents and practices of engagement. *Organization Study*, 34(12), 1835–1868.
- Steijn, S. & Lancee B. (2011). Does income inequality negatively affect general trust? Examining three potential problems with the inequality-trust hypothesis. GINI discussion paper no. 20.
- Surówka-Marszałek, D. (2010). Determinanty kształtujące wzrost efektywności sieci innowacyjnych [Determinants of increasing efficiency of innovative networks]. In A. Stabryła (Ed.), *Koncepcje zarządzania współczesnym przedsiębiorstwem* (p. 72). Kraków: Fundacja Uniwersytetu Ekonomicznego.
- Wasiluk, A. (2013). Zaufanie i współpraca pomiędzy przedsiębiorstwami w perspektywie budowy i rozwoju struktur klastrowych [Trust and cooperation between enterprises in the perspective of building and developing cluster structures]. *Economics and Management*, 5(4), 49–66.
- Wierzbiński, B., & Potocki, T. (2012). The importance of trust and reputation on small and medium enterpises (SMEs) in their business activity. Eurasia Business and Economics Society. Anthology. Warsaw, Poland, 01–03 November 2012.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, 9(2), 141–159.
- Zak, P. J., & Knack, S. (2001). Trust and growth. The Econometrics Journal, 111(470), 291–321.

# Instant Articles (Facebook): The Impact of Trust and Relations Among the Partners Pursuing the Strategy of Coopetition



Jan Kreft

Abstract Coopetition refers to simultaneous competition and cooperation between the rivals. Such a strategy involves organizations who—while competing and cooperating with each other—both take advantage of such a relation *Instant Articles* comes as a project involving the coopetition strategy developed by Facebook and press publishers who since 2015 have been offering instant access to articles which until then were first of all available in publishers' websites or in traditional paper press. The aim of the article is to identify the significance of trust in business partners who have decided to pursue the strategy of coopetition. The survey carried out in May 2016 on the Polish media market was of quality nature. To collect the required data, some in-depth interviews were carried out with the CEOs of publishing companies in Poland. The obtained results indicate a low level of trust in Facebook, expressed by the CEOs of Polish publishing companies. The obtained results allow to conclude that limited trust is not a barrier which entirely excludes a chance for coopetition.

**Keywords** Coopetition · Facebook · Instant Articles · News market

#### 1 Introduction

Strategic relations between traditional media (paper press, radio, television) and new media (especially those which operate in the Internet) have become a subject of numerous studies on the media market (Picard 2010). Most of the papers, however, seems to display its fragmentary nature, as it mostly refers to the particular media organizations or to the consequences of changes that have affected political and economic life of the country (Mitchelstein and Boczkowski 2010). Majority of the research presents individual analyses, and the crisis of traditional press reading comes as the frequently analyzed problem (Gaskins and Jerit 2012).

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The strategic challenges which are faced by media organizations also undergo many analysis; thanks to digitisation and multimedia development, media systems, which have been so far safely hidden behind the high barriers of market entry, must now face growing competition, since such barriers have already disappeared (Picard 2000). However, the research studies on the relations between resignation from traditional paper press, by replacing it with new media, and the opportunities for cooperation between media competitors are still scarce. Considering the media market, a common view referring to the atrophy of the current business models followed by publishers and on the revolutionary and inevitable character of transformations, and on the success meant exclusively for new media organizations, especially for social media, does not foster the idea of coopetition, the participants of which hold similar competitive positions. Such dominant sentiments that can be traced on the developed media markets are beyond the influence of traditional media organizations, just the opposite to the factor which is rooted in the organizational social context, namely: in the ability of business partners to combine their organizational cultures in a flexible way.

The aim of article is to identify the significance of trust in business partners who have decided to pursue the strategy of coopetition. The obtained results allow to conclude that limited trust is not a barrier which entirely excludes a chance for coopetition.

The paper begins with the concept of coopetition and importance of trust in the relations of organizations. Then it moves on to a close examination of Instant Articles project. In the next section Facebook's coopetition with press publishers is shown. Then, the applied methodology is discussed, the findings of the research are presented with the conclusions.

# 2 Coopetition

Coopetition refers to simultaneous competition and cooperation between the rivals (Brandenburger and Nalebuff 1995). Such a strategy involves media organizations who—while competing and cooperating with each other—both take advantage of such a relation. The tension resulting from the fact that such contradictions must be reconciled affects the ambiguity of the final results (Ritala 2012).

Expert literature emphasizes the lack of one commonly accepted definition for coopetition (Czakon et al. 2014). It is interpreted as a merger of cooperation and competition which allows the participants to formulate a new business perspective (Dagnino 2007), as simultaneous competition and cooperation and some other form of cooperation (Walley 2007). Bengtsson and Kock (2000) understand it as a dyadic and paradoxical interaction between two companies which cooperate in one field of business and compete in another field of their business activities (Riivits-Arkonsuo and Leppiman 2013).

Coopetition may involve two organizations (simultaneous cooperation and competition of two economic entities) or many of them (simultaneous cooperation and

competition of two organizations which affect a number of other organizations)—the former example refers also to Instant Articles. The concept of coopetition springs from the idea of stakeholders, who—competing with their prices, quality and experience—decide to cooperate (Wang and Krakover 2008). The attractiveness of such a relation is affected by a number of resources: the value of competitive brands, finance or opportunities for development (Das and Teng 2000). The cooperation between competitors and active relationship management are considered to be some basic elements required to reduce any threats that may result from competition. It is also interpreted as a limitation of the consequences resulting from excessive competition, hyper-competition (Padula and Dagnino 2007).

Other advantages of coopetition are: limitation of risk, reduction of costs, accessibility of assets without any considerable investments and opportunity for fast development of media products (Bengtsson and Kock 2007). Coopetition is to facilitate the relations with receivers, it is used to develop a competitive edge over the competitors coming from the outside of the coopetition members, by providing a portfolio of media products. It is also used to increase variety in the product offer (Roy and Yami 2009).

#### 3 Trust and Coopetition

Each business relationship involves elements of trust, and its level determines the incurred costs. A multi-lateral character of the relationship between economic entities allows us to state that the companies which multiply such relations are not able to manage them fully and to predict their consequences, even because of the fact that entities cooperating with other companies are aware that their partners may always tend to weaken their position. The relations between business partners are also changeable, as they are under the pressure of competitive interdependence and attendant uncertainty as far as the advantages resulting from their cooperation are concerned. Instability of the coopetition relations refers to their asymmetric nature and to a possibility of conflicts that may rise because of some organizational and cultural reasons.

Hence, coopetition comes as a relation which depends on trust, although the measure of its success is not the level of loyalty/trust, but the level of achievement in terms of economic objectives, such as profit, shareholders' wealth or a market share (Peng and Bourne 2009). Considering such a context, it is possible to state that the conflicts between coopetition partners do not determine the withdrawal from the relationship (Hamel et al. 2000) even if it is followed by limited trust. Trust is also present in the context of strategic management in the concept of transactional costs. It is based on the idea of limited rationality of behavior which determines higher costs and on the idea of opportunism which induces companies to identify and to care of their own strategic interests (Williamson 1991).

The lack of trust translates into higher costs as derivative costs resulting from control and coordination of operations. The accepted level of the lack of trust is

followed by reduction of transactional costs and decreased opportunism. A low level of trust is also related to actual, alleged or latent intentions of business partners, wrong choices or unethical behavior. In such cases, transactional costs include costs of obtaining information about actual intentions of partners and costs related to the monitoring of contracts.

Considering fast evolution in the media market and hyper-competition among media organizations, coopetition allows entities to stabilize their relations through diversification of activities, to recognize market niches easily and to search for better efficiency through flexibility, adaptation, limitation of expenses and improvement of the position of cooperating parties towards common threats. It also allows companies to take risky opportunities in their business operations (Kreft 2015).

The number of research studies on coopetition in media is still scarce (Po-Ching 2012; Lee 2014). There are only few examples of analytical publications, among which the studies referring to the coopetition of Apple and Google could be mentioned. There are also studies on the coopetition of intermediaries involved into searching and analyzing contents with publishers and companies of new media technologies (Smyrnaios 2012). The relations between the alliances and coopetition (Daidj and Jung 2011) have been also analyzed, with the relations between business partners on the on-line video market (Evens 2014).

The research indicates that media organizations decide to enter coopetition more willingly when their revenues fall, in a situation when all market participants have entered the stagnation stage and when some efforts are made to develop new solutions for business (Das and Teng 2000). Coopetition allows companies to benefit from their operation without any takeovers of their market competitors and without any considerable investments into joint ventures. It requires only some minor corrections, improvements or abilities of sharing media contents on various platforms, without any violation of policies pursued by the owners and of any legal regulations (Küng et al. 2008).

# 4 Concept of Instant Articles

Instant Articles is a coopetition project presented by the authorities of Facebook to press publishers. Within the frames of the project, Facebook users are given immediate access to articles presented by the publishers, who in return for the provided contents are given an opportunity to contact Facebook users, and they can earn money from advertisements placed next to their articles. Initially, in May 2015, only some selected publishers were invited to enter the *Instant Articles* project: *The New York Times, The Guardian, Bild, BBC News, The Huffington Post, Mashable, MTV, Daily Mail* and *Business Insider*. Since 2016 however, all publishers and website owners have been allowed to participate in the project (Griffith 2015).

The publishers' contents presented as *Instant Articles* are available on the Facebook servers. Hence, it is possible to load them instantly while browsing through the homepage and to enlarge HD photographs which are placed in the

articles. The project is supposed to combine advertisers' expectations with such distinctive advantages of Facebook as easy access to its users and a possibility to redirect them to publishers' homepages and their Facebook profiles.

Considering publishers' point of view, the main advantage offered by *Instant Articles* is the potential access to millions of Facebook users, who can be redirected to publishers' homepages in the Internet. Another important advantage is insusceptibility to ad-blockers.

However, there are also some direct, short-term threats, such as a decreased number of advertisers who may follow the best contents on Facebook, the changeability of the Facebook algorithm which may foster other contents or categorize publishing companies in accordance with some unclear criteria. Considering such threats, the IMMA appeals to publishers to abandon destructive competition among themselves, according to Socrates' words: the secret of the change is to concentrate all the energy on building the new instead of on fighting the old. In other words, digital Darwinism might turn out to be bad for some waiting dinosaurs (Wang 2015).

The basic domain of Facebook operation is traffic and the environment of content development which is managed by Facebook users; the content is not created by some professional journalist institutions. Considering the point of view presented by Facebook, its involvement into the *Instant Articles* project comes as a form of complement to the current strategy of the organization, which sets up new standards to new media; for publishers it comes as a chance to leave old niches they have been stuck in.

The problem of relations between publishers and Facebook (*Instant Articles*) has not been a subject of any studies so far. Considering the management of traditional press publishing and presenting its digitalized editions, the significance of social media may be interpreted based on the analysis provided by the Reuters Institute, which emphasizes the fact that news services hold deep concerns about the impact of Facebook and Twitter as becoming default gates for getting news and information. Those concerns refer to the takeover of users and values which has been done by the above-mentioned organizations; the concerns also refer to a possibility that investments into original journalism will be stopped (Newman 2016). Some research has been done on the relations between Facebook and regional press publishers (Hess and Bowd 2015) and on the role of Facebook in the context of the agenda setting theory (Bro and Wallberg 2014).

#### 5 The Role of Facebook

Considering the aspect which refers to the management of traditional media organization, Facebook comes as an important reference source for the articles available at the publishers' websites (Küng et al. 2008). A sudden drop in the number of users (by a half) who directly entered the New York Times website during the years 2013–2015 and a simultaneous high growth in the number of Facebook users' visits on that website are an important signal that indicates a dominating trend. In 2016

Facebook has become not only the most important reference source (Ingram 2015) but also the main source of information for four adult Americans out of ten (Newman et al. 2016).

In the group of users aged between 18 and 24, the social media in the United States are more important information sources than television, which is still the most important source of news for older media users (Matsa and Mitchell 2014). Although information on traffic directed from Facebook to the websites of particular publishers in Poland is not available, it is possible to conclude—based on the popularity of Facebook—that such data are quite considerable in numbers on the Polish market. According to the survey carried out by Gemius/PBI, the number of Internet users in Poland in May 2016 was total 25.2 million, including 18.2 million users of mobile devices. In Poland there are approximately 17 million Facebook users. A group of traditional printed press readers has been shrinking, whereas the number of readers who are interested in digitalized press editions has been maintained at a considerably low but stable level. Also, the situation of Internet news portals has become stable as well (Kreft 2016).

### 6 Research Problem and Methodology

The article presents the following research assumption: trust affects the readiness to cooperate expressed by the authorities of various organizations, even if they are competitors on the market. The assumptions indicate the main objective of the article, namely: to identify the significance of trust in coopetition partners in the conditions of the asymmetric strategic positions they take. The main research question is: does trust in potential and actual partners predestinate their involvement into coopetition strategy?

The research carried out in May 2016 was of qualitative nature—each media organization selected for the survey came as an individual case study. The research presented the analyzed phenomenon in its natural context, as seen by its participants. The survey is of inductive nature and combines various assumptions, perspectives and concepts (Denzin and Lincoln 2009). The selected methodology is an interview, a structured conversation to obtain the required information (Czarniawska 2002). It is often applied in ethnographic research studies, and it is based on non-standardized questions. In the discussed analysis non-structured questions have been asked, that is namely: questions which have not been determined by any previous preparations, and standardized, non-structured interviews (Hollifield and Coffey 2006).

The research includes the interviews with the CEOs of publishing companies in Poland (N1–N10), and it also involves non-participatory observation of the strategies assumed by Polish publishers. Although giving numbers to the interlocutors, who have wished to remain anonymous, might seem improper, it seems to be commonly applied practice and has been applied in our survey as well. In accordance with Latour's (1987) methodology, the research author *follows the actors*, assuming their definitions and their points of view. However, there have not been any previous

assumptions made, and there have not been any statements questioned, even when deemed incorrect, in order to obtain a complete picture of the analyzed phenomena (Czarniawska 1999).

The interlocutors have been selected out of a group of publishers who administer Internet websites characterized by the largest numbers of real users (starting with the website with the highest number of users). Since eight of them have not agreed to participate in an interview or have rejected an invitation for such an interview, the participants of the interviews have been the CEOs of publishing companies taking 1–18 position on the list of most popular publishers' websites in May 2016 (Gemius 2017).

### 7 Findings

All the participants of the survey are familiar with the basic elements of the *Instant Articles* offer; three of them represent publishing companies which are involved in that project. Among the organizations who have been involved in *Instant Articles*, the most fundamental elements which can be traced in their argumentation are the following:

- N2: "We do not have a choice, actually. We are soon going to stop printing paper press and our main portal cannot support all the employees. So, we are looking for income wherever it is possible. At present the offer seems to be interesting, however it requires constant monitoring of results. If it turns out that the forecast is optimistic, we will stay in the project. However, if we find out that Facebook changes the rules of the game, and we are falling down with the results, we will make adequate decisions."
- N4: "We do not trust and we check. We have decided to participate in that project but we are cautious. We are a big publishing company as for the Polish market, and that is why we have decided to test the IA project on the medium-sized magazines."
- N5: "We will never develop such communities like Facebook, but we can actually reach them. And now it is our chance to do it. The walls of Facebook are high so we cannot get over them by ourselves. In media there is a constant fight for every individual reader so I believe that if only some of them see our brand on Facebook and associate good contents with it, we will have a chance to stay there for a bit longer. There are not many such opportunities there."

Among the organizations who have decided not to participate in *Instant Articles*, the most fundamental elements which can be traced in their argumentation are the following:

N1: "We will wait and see what happens. So far, redirecting from Facebook has been rather low, and there is no way we can get ourselves into any dependency. It is

- only a few percent. However, if the situation starts to change, we will get back to that question."
- N3: "Google and Facebook have already messed the market so much that nobody trusts them, however we are all doomed to cooperate with them. If you are not in Google, you do not exist in the Internet—many people believe in that, and we have to take that belief into our consideration. Now, if you do not cooperate with Facebook, you will find yourself in trouble very soon, because Facebook has become the main source of information. (...) A number of publishing houses CEOs cannot cope with that situation, they do not know what is going on. We believe that if it is worth our time and effort, we will decide to go into it."
- N6: "So far there have been too few examples to comment on. Besides, we have been involved into the development of new business models, and it may turn out that they are much more promising than getting dependent on Facebook."
- N7: "Well, you should never get rid of your family silver, should you? "Content is king" so we have decided to work independently. This is our strategy. We search for our income sources but the deal with Facebook would be too risky for us. There is a risk that people will read our texts only through Facebook and such a situation would be lethal for us. Perhaps we could win something in a short-term perspective, but after sometime it would probably turn out that we have dug our own grave."
- N8: "I do not intend to enter the IA project. I cannot imagine explaining my journalists that their articles would now appear on Facebook. I have been telling them for years that their work must be protected from stealing, and that is what various aggregations lead to in practice. That offer of Facebook is a short-term thing. If it weakened the popularity of our websites there would not be any way out of such a situation. Now we are fighting alone, but at least we still have some moves to make, and we can test some new solutions."
- N9: "I am afraid that Facebook just wants to hold all the cards. It constantly alters its algorithm and if it keeps categorizing publishers into better and worse ones, if it makes them dependent on it, then the publishers will lose their power to change anything. We will turn into content factories, dependent on distribution. So far, we have still retained some power to influence things, and let it last as long as possible."
- N10: "I cannot say that we will not enter such a project in the future. Now the only thing I know is that the market leaders are watching it carefully. There is no point in copying experiences from the US—we have different readers. Besides, Facebook has taught us to be cautious. They have messed up with the algorithms so many times that it will be the case now too. At the beginning it may be OK, but later on there will be only one winner. Facebook may lower contents visibility; it may also demand larger shares in advertisement revenues. There are many ways."

### 8 Conclusion

The aim of the presented article is to identify the significance of trust in business partners who have decided to pursue the strategy of coopetition. The obtained results indicate a low level of trust in Facebook, expressed by the CEOs of Polish publishing companies. In their argumentation, they refer and interpret the Facebook authorities' intentions and targets in various ways.

The results simultaneously indicate the publishers' readiness to become involved in the coopetition *Instant Articles* project. Such readiness defines the significance of trust in relations between the media organizations, which compete for the attention of their readers, and the users of social media. The leading press publishers depend—to various extent—on the volume of the traffic which is redirected to their websites by Facebook, and the level of that dependency comes as an important factor in making decisions about pursuing the coopetition strategy. Other factors are: the search for new sources of revenues obtained from advertisement in the new environment of social media and the pressure of a market trend in which the number of readers interested in traditional printed press has been decreased and the interest for social media is still growing up.

These factors may induce publishers to cooperate with Facebook or, at least, not to exclude such a possibility in the future, even if it is seen as asymmetric in terms of profits, and it seems to affect their strategy in a more significant way than the decision of Facebook to cooperate with the publishers. Further research may focus on the assessment of the impact resulting from the asymmetric interests in the coopetition on the transactional costs, which grow to a level that becomes unacceptable for one or more partners. It would be also interesting to analyze the relation between the type of industry and the level of trust in the coopetition strategy, and the impact of the partners' reputation on the coopetition strategy.

### References

- Bengtsson, M., & Kock, S. (2000). Coopetition in business networks to cooperative and compete simulaneously. *Industrial Marketing Management*, 29(5), 418–424.
- Bengtsson, M., & Kock, S. (2007). Cooperation and competition in relationships between competitors in business networks. *The Journal of Business and Industrial Marketing*, 14(3), 178–194.
- Brandenburger, A. M., & Nalebuff, B. J. (1995). The right game: Use game theory to shape strategy. *Harvard Business Review*, 73(4), 57–71.
- Bro, P., & Wallberg, F. (2014). Digital gatekeeping: News media versus social media. *Digital Journalism*, 2(3), 446–454.
- Czakon, W., Much-Kus, K., & Rogalski, M. (2014). Coopetition research landscape a systematic literature review 1997–2010. *Journal of Economics and Management, 17*, 122–150.
- Czarniawska, B. (1999). Management she wrote: Organization studies and detective stories. *Studies in Cultures, Organizations and Societies*, 5(1), 13–41.
- Czarniawska, B. (2002). Interviews and organizational narratives. In J. F. Gubrium & J. Holstein (Eds.), *Handbook of interviewing* (pp. 733–750). Thousand Oaks, CA: Sage.

- Dagnino, G. B. (2007). Preface. Coopetition strategy: Toward a new kind of interfirm dynamics? *International Studies of Management and Organization*, 37(2), 3–10.
- Daidj, N., & Jung, J. (2011). Strategies in the media industry: Towards the development of co-opetition practices? *Journal of Media Business Studies*, 8(4), 37–57.
- Das, T. K., & Teng, B.-S. (2000). A resource-based theory of strategic alliances. *Journal of Management*, 26(1), 31–61.
- Denzin, N. K., & Lincoln, Y. S. (2009). Qualitative research. Yogyakarta: Pustaka Pelajar.
- Evens, T. (2014). Co-opetition of TV broadcasters in online video markets: A winning strategy? *International Journal of Digital Television*, 5(1), 61–74.
- Gaskins, B., & Jerit, J. (2012). Internet news is it a replacement for traditional media outlets? *The International Journal Press/Politics*, 17(2), 190–213.
- Gemius. (2017). The results of research. Gemius/PBI May 2016. Gemius. Accessed January 17, 2017, from https://www.gemius.pl/wszystkie-artykuly-aktualnosci/wyniki-badania-gemiuspbi-za-maj-2016.html
- Griffith. E. (2015). Why nine publishers are taking the Facebook plunge. Fortune. Accessed January 21, 2017, from http://fortune.com/2015/05/13/facebook-buzzfeed-new-york-times/
- Hamel, G., Doz, Y., & Prahalad, C. (2000). Collaborate with your competitors and win. In C. Bartlett & S. Ghoshal (Eds.), *Transnational management*. New York: Irwin McGraw-Hill.
- Hess, K., & Bowd, K. (2015). Friend or foe? Regional newspapers and the power of Facebook. *Media International Australia*, 156(1), 19–28.
- Hollifield, C. A., & Coffey, A. J. (2006). Qualitative research in media management and economics. In A. B. Albarran, S. M. Chan-Olmsted, & M. O. Wirth (Eds.), *Handbook of media management and economics* (pp. 573–600). Mahwah: Lawrence Erlbaum Associates.
- Ingram, M. (2015, August 18). Fortune: Facebook has taken over from Google as a traffic source for news. Accessed January 19, 2017, from http://fortune.com/2015/08/18/facebook-google
- Kreft, J. (2015). New media coopetition: Active users as strategic challenge for media companies. In 15th International Academic Conferences, Rome, Italy, 14–16 May 2015. Prague: International Institute of Social and Economic Sciences.
- Kreft, J. (2016). From readers to users and creators. Migration of printed media readers to the internet: Research results of 2007–2015. Social Science, 90(4), 32–42.
- Küng, L., Picard, R. G., & Toewse, R. (2008). The internet and the mass media. London: Sage.
- Latour, B. (1987). Science in action. How to follow engineers and scientists through society. Cambridge: Harvard University Press.
- Lee, P. C. (2014). A case study for the Fubon Group–The Group's topology and patent activity in the digital convergence era. *Journal of Intellectual Law and Management*, 3, 1–72.
- Matsa, K. E., & Mitchell, A. (2014). 8 key takeaways about social media and news. Pew Research Journalism Project, Washington, DC. Accessed January 14, 2017, from http://www.journalism. org/2014/03/26/8-key-takeaways-about-social-media-and-news/
- Mitchelstein, E., & Boczkowski, P. J. (2010). Online news consumption research: An assessment of past work and an agenda for the future. New Media & Society, 12(7), 1085–1102.
- Newman, N. (2016). *Journalism, media and technology predictions 2016*. Oxford: Reuters Institute for the Study of Journalism. Accessed January 5, 2017, from http://reutersinstitute.politics.ox. ac.uk/our-research/journalism-media-and-technology-predictions-2016
- Newman, N., Fletcher, R., Levy, D., & Nielsen, R. (2016). The Reuters Institute digital news report. Oxford: Reuters Institute for the Study of Journalism. Accessed January 2, 2017, from https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Digital-News-Report-2016
- Padula, G., & Dagnino, G. B. (2007). Untangling the rise of coopetition: The intrusion of competition in a cooperative game structure. *International Studies of Management and Orga*nization, 37(2), 32–52.
- Peng, T.-J. A., & Bourne, M. (2009). The coexistence of competition and co-operation between networks: Implications from two Taiwanese healthcare networks. *British Journal of Manage*ment, 20, 377–400.

- Picard, R. G. (2000). Changing business models of online content services: Their implications for multimedia and other content producers. *International Journal on Media Management*, 2(2), 60–68
- Picard, R. G. (2010). The future of the news industry. Media and Society, 5, 365-379.
- Po-Ching, L. (2012). Empirical study on the digital convergence strategy and patent activity of Taiwanese media groups. *NTUT Journal Intellectual Property Law and Management*, 1, 1–121.
- Riivits-Arkonsuo, I. & Leppiman, A. (2013). Consumer online word-of-mouth-analysis through an experience pyramid model (pp. 1929–1934). Proceedings of the 9th EBES Conference, Rome.
- Ritala, P. (2012). Coopetition strategy when it is successful? Empirical evidence on innovation and market performance. *British Journal of Management*, 23(3), 307–324.
- Roy, S., & Yami, S. (2009). Managing strategic innovation through coopetition. *International Journal of Entrepreneurship and Small Business*, 8, 61–73.
- Smyrnaios, N. (2012). How does news infomediation operate online? The examples of Google and Facebook. Communication à la World Media Economics and Management Conference, Thessaloniki, May 23–27.
- Walley, K. (2007). Coopetition. An introduction to the subject and an agenda for research. *International Studies of Management and Organization*, 2(37), 11–31.
- Wang, R. (2015). Disrupting digital business: Create an authentic experience in the peer-to-peer economy. Boston: Harvard Business Review Press.
- Wang, Y., & Krakover, S. (2008). Destination marketing: Competition, cooperation or coopetition? *International Journal of Contemporary Hospitality Management*, 20(2), 126–141.
- Williamson, O. E. (1991). Strategizing, economizing, and economic organization. Strategic Management Journal, 12(2), 75–94.

### **Fuzzy Modeling of Customized Solutions for Corporate Performance Assessment**



Marius Pîslaru, Silvia Avasilcăi, and Lidia Elena Alexa

**Abstract** The social environment in which corporations operate is affected by their actions but equally corporations experience the pressures of society. The idea that the economic environment is currently in a transition phase from the knowledgebased economy and society to the innovation economy and society is strongly emphasized by the policy makers and experts' publications and reports underlining the pressure the companies are under in order to adjust to the environmental and economic changes and to become more competitive. The paper aims to develop and test, in a textile company from Iasi, a performance assessment model based on fuzzy modelling techniques. In order to assess corporate performance Balanced Scorecard approach was considered based on fuzzy technique. The corporate performance using lagging and leading indicators suggests that business performance should be evaluated not only by using financial indicators but also by simultaneously considering non-financial indicators. This way, it is possible to evaluate the business performance from a strategic perspective, taking into account not only past results but also leading indicators. The fuzzy it is suitable for industrial firms to monitor the performance indicators that can contribute to a sustainable competitive position.

**Keywords** Corporate performance assessment  $\cdot$  Fuzzy modeling  $\cdot$  Expert system design  $\cdot$  Decision making

### 1 Introduction

The contemporary industrial environment, subject to both globalization and regionalization, generates continuous challenges for industrial companies and production systems within these, which must demonstrate on one hand reactivity to the external environment and, on the other hand, internal flexibility for developing and

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maintaining a sustainable competitive position. Recent developments in the field of performance management and measurement are aligned to, and in the meantime are trying to respond to these contemporary challenges of the technological and socio-economic environment.

Both knowledge and innovation are essential elements for an industrial company in achieving and maintaining a sustainable competitive position. In this context, production systems are the interface between invention/innovation and socioeconomic development, being the ones that translate innovation into finished products and brings them closer to the customer, thus contributing to continuous improving of the quality of life. The field of performance measurement has known an explosive development since 1992, when the Balanced Scorecard Model (Kaplan and Norton 1992, 1996, 2006a, b) was developed and promoted. The model triggered radical change in approaching organizational performance, being the catalyst for a multi-criteria approach of organizational performance. Up to that moment most approaches in the field were almost exclusively focused on the financial aspects of organizational performance. The BSC approach involves identifying key components of operations, setting goals for them and finding ways to measure progress towards their achievement (Leon-Soriano et al. 2010).

The Balanced Scorecard suggests to approach organizational performance by means of four "perspectives": financial perspective, internal processes perspective, consumer perspective and innovation and growth perspective and it offers support to integrate physical and intangible assets into a comprehensive model (Rabbani et al. 2014) that creates a balance between financial and non-financial measures, internal and external stakeholders, long-term and short-term goals. Conceived initially as a tool for performance measurement, the extended use of this model made it to evolve into a strategic tool for organizational development (Avram and Avasilcăi 2014; Hoque 2014; Sorooshian et al. 2016).

Research in this field suggests that The Balanced Scorecard is used by 60% of the Fortune 1000 companies (Silk 1998). Other models used worldwide for performance measurement are "The Performance Pyramid" (Lynch and Cross 1995), the intangible asset scorecard (Sveiby 1997), ECOGRAI, the action-profit linkage model (Westbrook et al. 2000), the value added methods (EVATM—Economic Value Added, MVATM—Market Value Added), and more recently "The Performance Prism" (Neely 2002).

Although the BSC (Balanced Scorecard Model) conceptual framework has been widely accepted in the business community, the appropriate method of implementing the framework remains a challenge. For example, a broader set of non-financial attributes was incorporated into a company's measurement system, using the analytic hierarchy process (AHP) and its variant, the analytic network process (ANP) in order to facilitate implementation of the BSC (Leung et al. 2006; Boj et al. 2014). A three-level feature weighting system based on BSC design was proposed to enhance case-based reasoning inference performance (Yuan and Chiu 2009). Although significant research has been carried out in the field of performance measurement, the complex problem of defining and modeling indicators, on one hand, and the problem of aggregating indicators into an efficient system that should

contain and provide real-time information relevant for multi-criteria decisions are still subject to constructive debate.

Performance measurement is one of the world's top charts and is a major concern for organizations, especially industrial firms that are confronted with specific problems of production activities. The issue of performance parameters cannot yet be solved, especially with regard to aggregation of parameters in a flexible configuration that should provide, on one hand, real-time information for managerial decisions and, on the other hand, allow adjustment of performance parameters to environmental changes.

At the same time, the use of fuzzy logic for modeling economic phenomena is also a top research field in the world. Generally, using fuzzy logic in controlling industrial processes and especially in the field of performance, monitoring of production systems can provide the flexibility and reactivity necessary to achieve a high level of performance. The use of fuzzy techniques leads to solving a wide area of problems in the field of production systems, which would be a vital source of information for companies in terms of enhancing their performance and maintaining a sustainable competitive position.

The literature documents more and more initiatives for using fuzzy techniques for modelling economic phenomena and for industrial processes optimization. Still being a field less developed in the landscape of corporate performance assessment, such approach could be of real use for industrial companies in order to enhance their performances based on an integrated and flexible approach of using performance indicators (Yüksel and Dağdeviren 2010; Tseng 2010).

### 2 Fuzzy Model for Corporate Performance Assessment

Fuzzy logic represents a scientific tool which emulates human thinking allowing to model a system without comprehensive computation using both quantitative and qualitative data. The computations are made by words, and knowledge is defined by language rules (for example IF-THEN).

The success of fuzzy models in the sphere of management and different control systems is based on flexibility which is provided by the possibility of adding new linguistic variables, making it more elastic in design and implementation. This is one of the reasons why the modeling systems based on fuzzy reasoning became an increasingly common practice in the field of decision making especially in corporate performance assessment. The fuzzy modeling system proposed is based on three knowledge groups in order to point out the connections and principles that characterize different indicators and components of the corporate performance assessment, as well as their contribution to maintaining a sustainable competitive position. The inputs/outputs and the rules from every knowledge group are expressed through words or phrases combined with linguistic variables and fuzzy rules (Phillis and Andriantiatsaholiniaina 2001).

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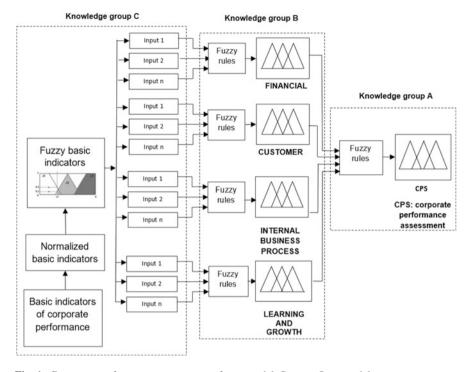


Fig. 1 Corporate performance assessment—fuzzy model. Source: Own model

The fuzzy model developed to support the sustainable competitive position of an industrial company is shown in Fig. 1. The fuzzy model is presented as an interconnected network of different knowledge groups whose goal is to point out a final characteristic of the system. The user provides input data for the first knowledge group named knowledge *group C* after a series of mathematical operations and fuzzy computations. For the other two knowledge groups, named B and A the aggregated input parameters are provided by other categories.

Based on the IF-THEN rules used by fuzzy logic reasoning, the input data from every knowledge group is combined in order to obtain a complex indicator, as an output data, which represent the input data passed to the next inference engine. Let's take into consideration, knowledge group B which uses the FINANCIAL resource indicator. This indicator is the combination result of the corresponding *Input 1*, *Input 2...Input n*, indicators. These ones are in turn the outputs of the knowledge group C. And so on, the FINANCIAL become as an input for knowledge group A, which based on the outputs of the other parameters namely, CUSTOMER, INTERNAL BUSINESS PROCESS and LEARNING and GROWTH computes the final output of the system, the CPS (corporate performance assessment) indicator.

Finally, the CPS is a very complex indicator which essentially is computed from a big number of basic indicators characterized by uncertainty and subjectivity. If we consider, for instance the parameters 'Customer satisfaction', 'Training and skill'

and 'New technologies' it is very difficult to quantify these parameters on a common scale and to compute them in a mathematical manner in order to assess performance. This is why the fuzzy logic reasoning represents an optimal scientific tool capable to manage this type of subjective and uncertain situations. The system has the ability to allow the adjustment of indicators and features according to user needs and to tune the fuzzy rules embedded in any knowledge group, thus providing flexibility and accuracy to the system.

## 3 Corporate Performance Assessment Based on BSC Perspectives

This particular case study focusing on the use of fuzzy modelling in measuring corporate performance was conducted in a textile company in Iasi, Romania. The data was collected from interviews with managers from different departments of the company and were later processed and analyzed by the researchers. In practice, the model used in the performance assessment process of a company needs to be adjusted in accordance with the particular realities and requirements of the corporation.

The values of the indicators used in the model are usually provided by companies from internal data or are estimated using different techniques such as life cycle assessment, average emission factor models, etc. presented extensively in the literature. In this case, the performance indicators were defined based on the BSC perspectives suggested by Kaplan and Norton (1992) and were determined according to the literature (Kaplan and Norton 1996; Lee et al. 2008; Leung et al. 2006; Sohn et al. 2003; Ihsan and Dagdeviren 2010). As a result, four BSC perspectives (namely: *financial*, *customer*, *internal business process* and *learning and growth*) and 16 performance indicators based on these perspectives were included in the analysis (Table 1).

The basic indicators are filtered with the purpose to assign values in the interval [0, 1] called normalization. Let's say that basic indicator c is the indicator value for the corporate whose performance we want to assess. In the interval  $[a_i, A_i]$  is the target of indicator c, where  $b_i$  and  $B_i$ , represent the minimum respectively the maximum value. The normalized value z will be computed as in Eq. (1):

$$z = \begin{cases} \frac{x - b_i}{a_i - b_i}, & b_i \le c \le a_i \\ 1, & a_i \le c \le A_i \\ \frac{A_i - x}{B_i - A_i}, & A_i \le c \le B_i \end{cases}$$
 (1)

Graphically this equation is presented in Fig. 2.

Normalized values, are calculated using linear interpolation between most desirable (target) and least desirable indicator values. In order to address information

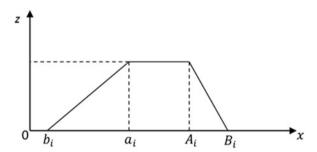
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Table 1	BSC perspectives	and performance	indicators
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BSC perspectives	Performance indicators	
FINANCIAL (40%)	Assets profitability	
	Sale profitability	
	Equity profitability	
	Cash flow	
CUSTOMER (30%)	Customer satisfaction	
	New customer acquisition	
	Target market share	
	Customer retention	
INTERNAL BUSINESS PROCESS (10%)	Product and service development	
	Manufacturing process	
	Product delivery	
	New technologies	
LEARNING AND GROWTH (20%)	Job satisfaction	
	Training and skill	
	Innovation	
	Knowledge sharing	

Source: Ihsan and Dagdeviren (2010)

**Fig. 2** Normalization of basic indicator *c* 



quality issues that may arise from the cumulative effects of past corporate pressures, data availability, and data accuracy, we use weighted sums of data for current and previous model inputs. So, the value z of the indicator can be computed using weighted sum Eq. (2)

$$z = w_1 y_1 + w_2 y_2 + \ldots + w_n y_n \tag{2}$$

Where  $w_1 + w_2 + \ldots + w_n = 1$ . The weighted sum of parameters used in the fuzzy model is performed based on their past data process called smoothing of normalized values. The fuzzification of the normalized value z, of indicator c, it is transformed from a crisp value into a linguistic variable to make it compatible with the rule base. Broadly, a linguistic variable is a variable whose values is formed of words).

1 0							
	Annual indicator value (normalized value)						
Indicator	2012	2013	2014	2015			
Assets profitability	0.624 (1)	0.649 (1)	0.679 (1)	0.595 (0.985)			
Sale profitability	0.411	0.397	0.423	0.503 (0.912)			
	(0.853)	(0.794)	(0.872)				
Equity profitability	0.712	0.694	0.688	0.738 (0.852)			
	(0.814)	(0.798)	(0.764)				
Cash flow	0.649	0.759	0.814	0.802 (0.605)			
	(0.549)	(0.572)	(0.612)				
Customer satisfaction	NA	NA	0.87 (0.91)	0.88 (0.92)			
New customer acquisition	NA	NA	0.54 (0.54)	0.57 (0.57)			
Target market share	0.195 (0.21)	0.204 (0.23)	0.217 (0.26)	0.301 (0.34)			
Customer retention	NA	NA	NA	0.114 (0.41)			
Product and service	0.347	0.409	0.434	0.530 (0.911)			
development	(0.644)	(0.712)	(0.748)				
Manufacturing process	NA	NA	0.719 (1)	0.722 (1)			
Product delivery	0.914 (1)	0.935 (1)	0.938 (1)	0.941 (1)			
New technologies	0.642	0.645	0.803	0.899 (0.871)			
	(0.541)	(0.542)	(0.796)				
Job satisfaction	NA	0.501	0.350	0.514 (0.402)			
		(0.398)	(0.263)				
Training and skill	NA	0.629	0.547	0.812 (0.657)			
		(0.431)	(0.402)				
Innovation	NA	NA	0.235	0.472 (0.723)			
			(0.519)				
Knowledge sharing	NA	NA	0.980(1)	0.980(1)			

Table 2 Parameters values of basic indicators and corresponding normalized ones

Source: Data collected from a textile company in Iasi County

NA mean the lack of data for the respective year

The values of the basic indicator and the corresponding normalized ones in parentheses are given in Table 2. Unfortunately, the data wasn't available for all the period considered and sometimes not even for all indicators. Despite of this, the calculations were made and should not be forgotten that the main purpose of the fuzzy system is to show that such an assessment is feasible and such analysis can be made on solid and pertinent considerations.

A fuzzy assessment of performance implies fuzzy inputs and fuzzy outputs. Because all performance indicators, basic or composite, are normalized, appropriate fuzzy partitions must be defined in the [0, 1] interval. Each linguistic variable has a number of fuzzy sets. The linguistic variables of basic indicators used in the model have three fuzzy sets with linguistic values *weak* (*W*), *average* (A), and *strong* (S). The fuzzy sets used in the model are presented in Fig. 3.

In order to obtain a composite indicator a combination of two or more fuzzy sets is required. Thus for the composite indicator presented in Fig. 4 has five linguistic values: *very bad* (VB), *bad* (B), *average* (A), *good* (G), *and very good* (VG).

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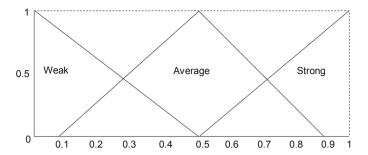


Fig. 3 Membership functions for basic indicator used in the fuzzy performance model

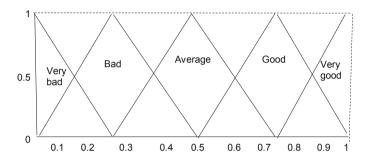


Fig. 4 Membership functions for composite indicator used in the fuzzy performance model

For an accurate representation of the final indicator, namely CPS, an even larger number of fuzzy sets must be used. The number of linguistic values for CPS is determined by assigning positive weights  $\alpha(0.4),\beta(0.3),\delta(0.1),\gamma(0.2)$  representing the relative importance of respectively FINANCIAL, CUSTOMER, INTERNAL BUSINESS PROCESS and LEARNING AND GROWTH in the calculation of CPS. The integer values 0,1,2,3 and 4 to the five linguistic values will be also assigned as follows: 0 corresponds to *Very Bad*, 1 corresponds to *Bad*, and so on. The computation of CPS will be performed as in Eq. (3):

$$CPS = \alpha FINANCIAL + \beta CUSTOMER + \delta INTERNAL + \gamma LEARNING$$
 (3)

The minimum index for CPS is 0 and the maximum is  $4 \times 4 = 16$ . Therefor we have to use 17 fuzzy sets in order to describe CPS precisely. But to avoid an explosion of linguistic variables we used five representative linguistic values for all composite indicators. For CPS we used nine fuzzy sets in order to aggregate the four parameters more precisely. These fuzzy sets are: extremely low (EL = 0), very low (VL = 1), low (L = 2), rather low (RL = 3), intermediate (I = 4), rather high (RH = 5), high (H = 6), very high (VH = 7), and extremely high (EH = 8; see Fig. 5).

The rule base for CPS is obtained from the Eq. (4) by assigning values from the set {0,1,2, 3,4} to the term sets {VB, B, A, G,VG} and to the term sets {EL,VL,L,

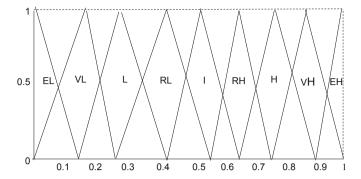


Fig. 5 Membership function of CPS (own compilation)

RL,I,RH,H,VH,EH}. For example, if FINANCIAL = A = 2 and CUSTOMERS = G = 3 and INTERNAL = B = 1 and LEARNING = A = 2 then CPS is computed as  $0.4 \times 2 + 0.3 \times 3 + 0.1 \times 1 + 0.2 \times 2 = 2.2$ , which corresponds to a greater extent the fuzzy set L.

$$CPS = \begin{cases} EL, & 0 \leq SUM < 0.5 \\ VL, & 0.5 \leq SUM < 1 \\ L, & 1 \leq SUM < 1.5 \\ RL, & 1.5 \leq SUM < 2 \\ I, & 2 \leq SUM < 2.5 \\ RH, & 2.5 \leq SUM < 3 \\ H, & 3.5 \leq SUM < 4 \\ VH, & SUM = 4 \\ EH, & SUM = 4 \end{cases}$$

$$(4)$$

FINANCIAL has four inputs in our particular case, namely, *Assets profitability* (AP), *Sale profitability* (SP), *Equity profitability* (EP) and *Cash flow* (CF). For ease of calculation and understanding we assumed that the weight of each parameter is equal to a unit. So its fuzzy set is determined from the following equations:

$$SUM = AP + SP + EP + CF \tag{5}$$

And

$$FINANCIAL = \begin{cases} VB, & 0 \le SUM \le 1 \\ B, & 1 < SUM \le 3 \\ A, & 3 < SUM \le 4 \\ G, & 4 < SUM \le 6 \\ VG, & 7 < SUM \le 8 \end{cases}$$
 (6)

Taking into consideration that the other three parameters have four inputs as FINANCIAL we can presume that the fuzzy sets for CUSTOMERS, INTERNAL and

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*LEARNING* is computed in a similar way. Of course the rule base of basic indicators could be more pessimistic or more optimistic relative to the influence each indicator has on the system.

### 4 Results

Products and sums of the membership grades of basic indicators are propagated to the composite variables and, finally, to CPS (corporate performance assessment). The result of the computation is presented below, showing the values obtained after compiling the data presented in Figs. 3–5 (Table 3).

Starting with membership grades of the basic indicators computation and continuing with membership grades of composite indicators we have all the data needed to determine the membership grades of CPS using the following rules (Phillis and Davis 2008; Phillis and Kouikoglou 2009):

(B)FINANCIAL + (B)CUSTOMER + (B)INTERNAL + (B)LEARNING  
= 
$$0.4 \times 1 + 0.3 \times 1 + 0.1 \times 1 + 0.2 \times 1 = 1$$
  
 $\Rightarrow$  CPS is B with grade  $0.16 \times 0.9 \times 0.29 \times 0.42 = 0.001753$ 

(A)FINANCIAL + (A)CUSTOMER + (B)INTERNAL + (G)LEARNING  
= 
$$0.4 \times 2 + 0.3 \times 2 + 0.1 \times 1 + 0.2 \times 3 = 2.1$$
  
 $\Rightarrow$  CPS is A with grade  $0.68 \times 0.72 \times 0.58 \times 0.43 = 0.1221$ 

The calculation, in the end, for CPS parameter:

$$CPS = (0.07 \times 0.5 + 0.64 \times 0.65 + 0.29 \times 0.75)/(0.07 + 0.64 + 0.29)$$
  
= 0.6685 (7)

The overall performance indicator CPS score is computed using centroid method defuzzification. Accordingly, the performance of the concerned business was

I C									
Indicator	Value								
	VB	В	A	G	VG				
	(0)	(1)	(2)	(3)	(4)				
FINANCIAL	0	0.16	0.7	0.14	0				
CUSTOMER	0	0.09	0.72	0.19	0				
INTERNAL BUSINESS PROCESS	0	0.29	0.58	0.13	0				
LEARNING AND GROWTH	0	0.42	0.43	0.15	0				
	EL	VL	L	RL	I	RH	Н	VH	EH
CPS	0	0	0	0.07	0.64	0.29	0	0	0

**Table 3** Membership grades of performance indicators

calculated as 66.85% at the end of the implementation made by using fuzzy BSC model. The interpretation of the result is dependent of the distance between the value obtained and 1: the closer the value is to 1 the more the corporate performance is improving and vice versa. The value obtained reflects the performance of the company based on BSC approach. Also after fuzzy system performing the conclusion riched is that the most important performance indicators that have a negative effect on business performance are: sales profitability and adaptation to innovations.

### 5 Conclusion

The model we proposed and tested is modular and flexible and it can also be adapted to assess different types of organizations. In practice, the analytical structure of the model—namely strategies, BSC perspectives and performance indicators may need to be adjusted according to the company's profile, industry or other specific requirements. The proposed model, represents an attempt to provide a tool for corporate performance assessment via computing techniques in order to ensure corporate sustainability. Based on linguistic variables and linguistic rules, the model provides quantifiable values of performance assessment. Based on these, the user can design appropriate policies according to the purpose it has to achieve in order to move on toward the path of sustainable development. The model we proposed provides new approaches in the field of performance assessment, and proves to be a useful tool for managers or policy makers. We also intend to further perform a sensitivity analysis in order to determine the effects of a change in a decision parameter on the entire system's performance.

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### References

- Avram, E., & Avasilcai, S. (2014). Business performance measurement in relation to corporate social responsibility: A conceptual model development. *Procedia Social and Behavioral Sci*ences, 109, 1142–1146.
- Boj, J. J., Rodriguez-Rodriguez, R., & Alfaro-Saiz, J. J. (2014). An ANP-multi-criteria-based methodology to link intangible assets and organizational performance in a Balanced Scorecard context. *Decision Support Systems*, 68, 98–110.
- Hoque, Z. (2014). 20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. *The British Accounting Review*, 46(1), 33–59.
- Ihsan, Y., & Dagdeviren, M. (2010). Using the fuzzy analytic network process (ANP) for balanced scorecard (BSC): A case study for a manufacturing firm. Expert Systems with Applications, 37, 1270–1278.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard-measures that drive performance. *Harvard Business Review*, 70, 71–79.

- Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75–85.
- Kaplan, R. S., & Norton, D. P. (2006a). Alignment: Using the balanced scorecard to create corporate synergies. Boston: HBS Press.
- Kaplan, R. S., & Norton, D. P. (2006b). How to implement a new strategy without disrupting your organization. *Harvard Business Review, March*, 100–109.
- Lee, A. H. I., Chen, W. C., & Chang, C. J. (2008). A fuzzy AHP and BSC approach for evaluating performance of IT department in the manufacturing industry in Taiwan. *Expert Systems with Applications*, 34, 96–107.
- Leon-Soriano, R., Munoz-Torez, M. J., & Chalmeta-Rosalen, R. (2010). Methodology for sustainability strategic planning and management. *Industrial Management & Data Systems*, 110(2), 249–268.
- Leung, L. C., Lam, K. C., & Cao, D. (2006). Implementing the balanced scorecard using the analytic hierarchy process and the analytic network process. *The Journal of the Operational Research Society*, 57, 682–691.
- Lynch, R., & Cross, K. (1995). Measure up! Yardsticks for continuous improvement. Cambridge, MA: Basil Blackwell.
- Neely, A. (2002). Business performance measurement: Theory and practice. Cambridge: Cambridge University Press.
- Phillis, Y. A., & Andriantiatsaholiniaina, L. A. (2001). Sustainability: An ill-defined concept and its assessment using fuzzy logic. *Ecological Economics*, *37*, 435–456.
- Phillis, Y. A., & Davis, B. J. (2008). Assessment of corporate sustainability via fuzzy logic. *Journal of Intelligent and Robotic Systems*, 55, 3–20.
- Phillis, Y. A., & Kouikoglou, V. S. (2009). Fuzzy measurement of sustainability. New York: Nova Science.
- Rabbani, A., Zamani, M., Yazdani-Chamzini, A., & Zavadskas, E. K. (2014). Proposing a new integrated model based on sustainability balanced scorecard (SBSC) and MCDM approaches by using linguistic variables for the performance evaluation of oil producing companies. *Expert* Systems with Applications, 41, 7316–7327.
- Silk, S. (1998). Automating the balanced scorecard. *Management Accountant*, 79(11), 38–40.
- Sohn, M. H., You, T., Lee, S.-L., & Lee, H. (2003). Corporate strategies, environmental forces, and performance measures: A weighting decision support system using the K-nearest neighbor technique. Expert Systems with Applications, 25, 279–292.
- Sorooshian, S., Aziz, N. F., Ahmad, A., Jubidin, S. N., & Mustapha, N. M. (2016). Review on performance measurement systems. *Mediterranean Journal of Social Sciences*, 7(1), 123–132.
- Sveiby, K. (1997). The new organizational wealth. San Francisco, CA: Berrett-Koehler.
- Tseng, M. L. (2010). Implementation and performance evaluation using the fuzzy network balanced scorecard. *Computers in Education*, 55(1), 188–201.
- Westbrook, R., Kumar, P., & Epstein, M. (2000). The drivers of customer and corporate profitability: Modeling, measuring and managing the causal relationships. *Advances in Management Accounting*, 9, 43–72.
- Yuan, F. C., & Chiu, C. H. (2009). A hierarchical design of case-based reasoning in the balanced scorecard application. Expert Systems with Applications, 36, 333–342.
- Yüksel, İ., & Dağdeviren, M. (2010). Using the fuzzy analytic network process (ANP) for Balanced Scorecard (BSC): A case study for a manufacturing firm. Expert Systems with Applications, 37 (2), 1270–1278.

# Paradise of Knowledge: The Emergence of the Lebanese Newspaper Industry, 1851–1879



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**Abstract** Industry emergence is one of the central topics in organizational theory. Researchers agree that different industries emerge for different reasons. This paper will study how the Lebanese newspaper industry emerged. The paper will show that the Lebanese newspaper industry emerged as a social movement. Both macro-level structural changes and micro-level grievances will be examined. The identity of the newspapers will be inferred from the framing process and from "stories" told by the newspapers themselves. Ultimately, the paper will show that the early newspapers projected a unified identity as a social movement. The paper will also stress the importance of both macro-level structural events and micro-level grievances.

**Keywords** Social movements · Framing process · Industry emergence · Lebanon

### 1 Introduction

Organizational studies and social movement analysis are among the most creative fields in the social sciences (McAdam and Scott 2005). Within organizational studies, organizational ecology has made great strides in the study of patterns of whole industries. Organizational ecologists have been able to develop several tools with which they studied the dynamics of many different types of industries. While these tools were apt at tackling mature industries, i.e. industries which had successfully emerged and for which the boundaries had stabilized, the fertile area of industry emergence was barely touched (Astley 1985). The result was that the two fields, organizational ecology and social movement analysis, rarely crossed paths. This was because while organizational ecologists were busy studying stable industries, social movement analysts were concerned with the study of how movements challenge and change established systems. In the few cases were the two fields met it was at the hands of social movements theorists who tried to incorporate some of the ideas of

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organizational ecology into social movement analysis by studying the effect that organizations have on social movements [e.g. Minkoff (1997), Olzak and West (1991), and Olzak and Uhrig (2001)]. Recently, armed with a new array of theoretical tools, organizational ecologists have turned their attention to one of the most important questions in the study of any industry: why, and how, do certain industries emerge? Since emerging industries are characterized by instability (Navis and Glynn 2010) and incoherence (Santos and Eisenhardt 2009) this meant that a shift in perspective was inevitable for scholars of organizational ecology.

This paper will look at the reasons that led to the emergence of the newspaper industry in Lebanon by looking at how these newspapers "framed" their goals. A close inspection of the early issues of the founding newspapers in Lebanon will show that there were two dynamics at play. These two dynamics, macro-level structural changes and micro-level grievances, have been usually studied separately in the social movement literature. More so, this paper will also show that neither macro-level structural changes nor micro-level grievances were secondary in importance. The emergence of the newspaper population is a product of both these dynamics, and the result would not have been achieved if one of them were absent or indeed artificial. This paper will also show that the first newspapers were evolutionary and not revolutionary in that, at least at first, they considered themselves obedient subjects of the Ottoman Sultanate. Most importantly I will show that the original framing process did not infringe on the political sphere, but instead it set as its target the educational sphere.

### 2 Literature Review: Social Movements

One of the dynamics which social movements can contribute to with regards to industries is the legitimation process in nascent industries (Weber et al. 2008). In order to have a clear understanding of how these movements contribute to the emergence of markets or industries, it is imperative that we have a clear definition of the term. A flexible definition was provided by Rao et al. (2000, p. 244) who state that "Social movements may be defined as organized collective endeavors to solve social problems." However, Weber et al. (2008, p. 531) contend that "there is in fact limited consensus in the literature on collective behavior about what constitutes a social movement." Touraine (1985) criticized studies of social movements for being too naïve and lacking a clear definition for the term. Snow et al. (2008, p. 11) define social movements as such: "Social movements are collectivities acting with some degree of organization and continuity, partly outside institutional or organizational channels, for the purpose of challenging extant systems of authority, or resisting change in such systems, in the organization, society, or world system in which they are embedded."

Extant literature in social movements has diverged along two clear paths: the resource-mobilization perspective and the psychofunctional perspective (Snow et al. 1986). Scholars adopting the first perspective concentrate on strategic issues which

are found in organizational studies such as organizational structures and processes (McAdam and Scott 2005). Unlike the psychofunctional perspective, resource-mobilization rejects the notion that emotions are the driving factor behind these movements (Cohen 1985). It is therefore no surprise that this school of thought assumes high levels of rationality in the agents. While some resource-mobilization theorists do not deny the presence of grievances, they argue that such grievances are a natural product of all power plays and hence are present in all environments (Cohen 1985). Therefore, the real driving force behind the formation of social movements is to be found in the changing opportunities (Jenkins 1983; McCarthy and Zald 1977). Others, most notably Zald and McCarthy (1987) have taken an even more extreme view arguing that grievances are in some cases manufactured by the entrepreneurs in order to increase the likelihood of the success of the social movement. In general, all resource-mobilization theorists hold that the focus on microlevel factors such as the psychological state of those involved has pushed back important macro-level processes.

Proponents of the psychofunctional perspective on the other hand stress the importance of grievances that are the result of "preexisting social arrangements" (McAdam and Scott 2005), while criticizing the assumption of excess rationalism on which the resource-mobilization perspective was built (Snow et al. 1986). In addition, just as they were criticized for ignoring macro-level processes, researchers who adopted the pshychofunctional perspective criticized the proponents of resource-mobilization for ignoring micro-level processes (Jenkins 1983). The grievances, as argued by these researchers, were what provided the movements with the necessary social capital (McAdam and Scott 2005). However, it was necessary that these grievances be shared and understood by most agents alike. The heightening of these shared grievances would lead to the formation of social movements. Snow and Soule (2010) distinguished between individual-level grievances and mobilizing grievances and argued that while individual-level grievances were ubiquitous, mobilizing grievances were not. Resource-mobilization scholars, by failing to make this distinction, have wrongly assumed that all grievances were ubiquitous.

Although the above differences are substantial, there is a consensus among social movement scholars with regards to the importance of what Goffman (1974) referred to as "framing". Goffman (1974) posited that frames helped people make meaning of the world. In that way, they are similar to schemata except that frames, unlike schemata which were predefined perceptions, are outcomes of negotiated meanings (Benford and Snow 2000). Social movement scholars, most notably Benford and Snow, used frames to develop what they termed collective action frames. In the words of Benford and Snow (2000, p. 614) framing, "denotes an active, processual phenomenon that implies agency and contention at the level of reality construction. It is active in the sense that something is being done, and processual in the sense of a dynamic evolving process. It entails agency in the sense that what is evolving is the work of social movement organizations or movement activists. And it is contentious in the sense that it involves the generation of interpretive frames that not only differ from existing ones but that may also challenge them. The resultant products of this framing capacity are referred to as "collective action frames."

These collective action frames are crucial in the formation of new markets, or industries, in the case of entrepreneurs who operate within social movements (Rao et al. 2000). For the scholars of resource-mobilization, the social movement will have to enhance, or even create, in such a way that they resonate with the audience. For scholars of the psychofunctional perspective, collective action frames must be preceded by an increase in the intensity of the grievances. Either way, the social movements will have to diagnose the problem, propose a solution, and provide the motivation for action (Snow and Benford 1988; Weber et al. 2008). This implies that (1) agency has a central role in the formation of new industries (Benford and Snow 2000), (2) collective action frames are dynamic in their nature (Benford and Snow 2000; Snow and Soule 2010), (3) meaning creation and interpretation play an important role in the process (Benford 1997, 2005; Snow et al. 1986).

In order for social movements to legitimate their activities, they have to strategically align their collective action frames with those of the audience (Benford and Snow 2000; Lounsbury et al. 2003; Snow et al. 1986). Frame alignment is concerned with linking the social movement's orientations to those of the individual audience members (Snow et al. 1986). The presence of grievances by itself is not a sufficient condition for successful mobilization. What truly matters is that the social movements identify and give meaning to these grievances in a way that resonates with the intended audience (Benford 2005; Snow et al. 1986). Since collective action frames "encode" experiences (Snow and Benford 1992), social movements must make sure that this encoding is both intelligible and not counter-intuitive to audience members. Part of the alignment process is the creation of a vocabulary and a set of "stories" that help shape the audience's perceptions (Wry et al. 2011). In doing so, social movements can help situate their goals and intentions within the wider context of the cultural and political environment. These linguistic tactics however also play a central role in the creation of a unified collective identity, which is a necessary condition for successful emergence (Swaminathan 2001; Weber et al. 2008). According to Benford and Snow (2000, p. 631), "an understanding of identity processes, and particularly collective identity, is fundamental to understanding the dynamics of social movements."

## 3 Empirical Setting: The Emergence of Lebanese Newspapers

The Lebanese newspaper Hadiqat al-Akhbar the first privately-owned Arabic newspaper to be published in the Arab world (Illias 1997; Tarazi 1933). This newspapers was preceded by several Arabic newspapers, but those were either published by governments or, in one case, in a non-Arab country. Up until the end of 1879, the Lebanese had published 26 newspapers in Lebanon, out of which 25 were published in Beirut. Out of the first 26 newspapers, one was published by the government, two by groups of scholars, six by Christian missionary groups, sixteen by Christian

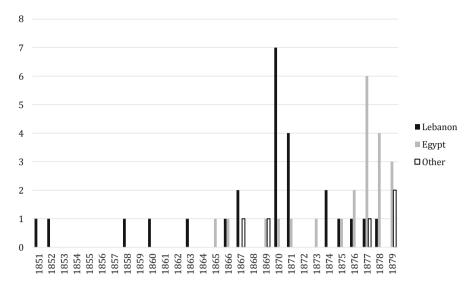


Fig. 1 Newspaper founding events in all Arabic countries up to 1879. Source: Author's own study

individuals and one by a Muslim. Figure 1 shows the founding events in Lebanon, Egypt, and all the remaining Arabic countries up to 1879 excluding those newspapers that were founded by the government. Although hailing from one of the smallest countries, the Lebanese were the leaders when it came to the emergence of the newspaper industry in the Arab world.

### 4 Micro-level Grievances

In 1516, the Ottomans conquered Greater the area which is today known as Syria and Lebanon. The Emir of the Mountain was free to rule the land and tax the people, as long as he paid the Ottoman authorities the required respect, and taxes. Previously, the main feature of Middle Eastern commerce was the transit of Asian peppers, spices and silk. Most of these products were destined to Venice (Owen 1993). Now, the Ottomans allowed other European companies, most notably English, French and Dutch, access to the area. The result was an increase in the demand for silk which had previously been produced on a small scale for local use only (Salibi 1988). So in order to increase production of silk, the Druze landlords needed access to a larger labor force, and that is exactly what they found in the Maronites of the north. This led to many Maronites migrating from the north to the areas controlled by the Druze landlords.

Eventually Fakhr al-Din rebelled against his masters and in 1633 he was captured and taken as a prisoner to Istanbul where he was executed (Salibi 1988). The rule of the mountain passed to the Shihabs, led by Bashir Shihab, who were Sunnites from

the Wadi al-Taym and not from Mount Lebanon. The Shihabs slowly started converting to Christianity. Throughout all this time, the Christians had been increasing in number at a far greater rate than their Druze counterparts. When Muhammad Ali Pasha rebelled against the Empire he sent his son Ibrahim Pasha to invade Greater Syria (Syria, Lebanon, Transjordan, and Palestine) in 1832. Bashir Shihab chose to align himself with the Egyptians. Unlike the Ottomans, the Egyptians decided to rule all of Greater Syria directly, and they proved to be much more efficient at it (Makdisi 2000). A revolt soon spread to many areas, and in order to counter it, Ibrahim Pasha distributed arms to the Christians who stuck by the side of Bashir Shihab (Tarābulsī 2007). This was to be the first time in the history of Mount Lebanon that the policies of the rulers were based on the sects of the people (Khalaf 1982). Previously, the people were divided into commoners and chiefs, with the former living to serve the later. According to Makdisi (2000), 1841 was the birth of sectarianism in Lebanon.

The Ottomans returned to a different Mount Lebanon than the one they had previously ruled. The old social hierarchy was starting to disintegrate and in its place a new system, which was based on sectarian divisions, was starting to form (Khalaf 1982; Makdisi 2000). As the Druze chiefs returned from their exile back to their villages and tried to reclaim the lands that they had previously controlled, they were faced with a hostile Christian peasantry. The peasants were backed by the new emir of Mount Lebanon, and the Druze were quick to retaliate. The fighting soon spread to other regions and hundreds of Druze and Christians were killed. On December 7 Mount Lebanon, for the first time ever, was split along sectarian lines into two gaimmagamiyya. The first was located in the north of Mount Lebanon, where the peasants and the chiefs were Maronite. To the south another qaimmaqamiyya was established. These reforms did not last long. The Maronite peasants in the north refused to be slaves to the Khazin and Hubaysh families while the Druze in the south refused to recognize the authority of the newly appointed qaimmaqam (Tarābulsī 2007). To make matters worse, the Ottomans recruited Maronites to help them fight the Druze rebellion in the south, thus further increasing sectarian tensions.

The missionary groups also contribute to the rising sectarian tensions. Makdisi (2000) described the arrival of missionary groups as a gentle crusade. Previously, contact between the Lebanese and Christian groups such as the Jesuits was confined to the Roman Maronite College in Rome and to some advisors for the Maronite Patriarch in Lebanon. In the nineteenth century this field of contact was significantly expanded to include Mount Lebanon and coastal cities like Beirut. The arrival of the missionary groups, at a time when Bashir Shiab II was becoming more and more aware of his Christianity and the Egyptians and European powers were redefining the landscape along sectarian lines, would speed the process of 'sectarianization' in the mountain.

The years of 1856–1858 were economically one of the hardest on the peasants. By that time France had become the main recipient of the silk produced in Mount Lebanon. In that period Lyon suffered an economic recession and the production of silk in Mount Lebanon was halved (Tarābulsī 2007). To make matters worse, there was an economic downturn which began in 1856 (Buheiry and Conrad 1989), which

was followed by an especially severe winter in 1857, and a dry season in 1858. All these factors led to the commoners rebelling under the leadership of Tanyus Shahin. Shahin complicated matters further yet when he mixed the social with the sectarian. Once again, a social problem was to be given a sectarian spin, and the Christianity of the rebellion became its most defining characteristic (Makdisi 2000). The Druze of the south were quick to act. By the end of the war, 5000 people were killed in Mount Lebanon alone with 200 villages being burnt (Tarābulsī 2007).

The old system which was based on the qaimmaqamiyya was replaced by combining both into a single mutasarrifiya (Tarābulsī 2007). The new system proved to be successful and Mount Lebanon would not be the scene of any civil strife from then until the fall of the Ottoman Empire. However, Mount Lebanon was slowly to lose its prominence. The civil war caused many people, mostly Christians, to immigrate. While Mount Lebanon was loosing its importance, Beirut, on the other hand, was beginning to rise.

At the beginning of the nineteenth century, Beirut had a population of 6000 and there was little indication that it would become the most important city in Lebanon (Buheiry and Conrad 1989). By the end of the century it had a population of 120,000 (Fawaz 1983). During the same period, it also grew from a small seaport which was overshadowed by Alexandria and Sidon to become the most important seaport in the Mediterranean. Unlike Mount Lebanon, the original inhabitants of Beirut were Sunnites and Greek Orthodox. Due to their defeat, many Maronites left the mountain and went to Beirut, thus ending the previous equality between Muslims and Christians in the city (Fawaz 1983). While the opening up of the Ottoman Empire to trade with Europe in general benefitted Beirut, it was the silk industry which had the greatest effect on the city's fortunes. With rising demand from France silk became the number one export of Beirut (Buheiry and Conrad 1989; Owen 1993). However, there were many factories which were owned by local people, although these tended to be smaller in size (Fawaz 1983; Issawi 1988). These local owners, and the peasants that ploughed the lands, needed capital in order to run their businesses. It was in the 1850s that new European financial institutions were created to channel savings into investments abroad (Owen 1993). According to Buheiry and Conrad (1989, p. 503), "most significant in terms of social transformation was the rise of a rural bourgeoisie of landowning peasants with access to the lucrative silk-trading centers in nearby Beirut, and with political ambitions to match their growing economic and social status." Unfortunately, the increase in the material wealth of the city was not equally distributed among its inhabitants. The new middle class that connected European capital and Mount Lebanon was largely composed of Christians, with very few Sunnites (Issawi 1978). As early as the 1840s, only 3 of the 29 merchant houses that traded directly with the Europeans were Muslim (Fawaz 1983). In addition to the financial gains, the Christians were the recipients of important legal benefits thanks to capitulations extended to them by the Europeans.

### 5 Macro-level Structural Changes

The first printing press in the Arab world was established in 1610 Der Qazhiya in Tripoli, which is located in the north of Lebanon (Sabat 1958). This printing press did not last long and it would be more than 100 years before another printing press was established in Lebanon. The first Arabic printing press in Lebanon was established in 1733 by the Deacon Abdullah Zakher (Sabat 1958). The Muslims had to wait until 1727 when on the 2nd of July an imperial decree stipulated that books in the Ottoman Empire were to be printed. Sabat (1958) identifies the years 1834–1869 as the years where the printing press took hold in Lebanon, especially in Beirut. The first printing press to be owned by an individual was the Syrian Printing Press that was founded by Khalil Khoury the founder of Hadiqat al-Akhbar the first newspaper. Others followed in 1858, 1861, 1865 and 1868.

The missionary groups that landed on the shores of Lebanon had an immense impact on the cultural scene in Lebanon. The most important was the educational sphere. In 1831 a group of American Protestants came to Lebanon in an effort to convert Catholics to their sect. In 1834 the American missionaries relocated their printing press from Malta to Beirut so that they could easily supply their schools with books. The Jesuits established their first printing press in 1847. The Catholic missionaries and the Protestant missionaries soon started competing with each other and this led to the creation of many teaching institutions.

The middle of the nineteenth century saw the birth of many small-scale schools. This is clearly reflected in a series of reports submitted to the Colonial and Continental Committee of the Free Church (Lowthian et al. 1856). According to the reports schools were being established in several villages quickly and that the attendance numbers were increasing each year. The 1863 report states that there were 1500 pupils in attendance at all schools. The American missionaries on the other hand report that by 1860 they had opened 33 schools which had a total of around 1000 students (al-Rifa'I 1967). By 1862, the number of schools had increased to 41 (Tarābulsī 2007). The Jesuits on the other hand had opened schools in Beirut in 1839, in Zahle in 1844, and in Damascus and Aleppo in 1873.

Soon, the schools that were being built were taking on a much larger scale. In 1863, the Lebanese scholar Butrus al-Bustani founded the National School. In 1865 the Roman Catholic Patriarch Gregory the first also founded al-Madrasah al-Batriyarkiya. In 1866 the American Protestant missionaries relocated a school that they had previously started in Ibay to Beirut and called it the Syrian Protestant College. In 1875 the Jesuit fathers moved their school from Ghazir to Beirut and renamed it Saint Joseph College. That same year also saw the founding of al-Hikmah school by Joseph al-Dibs, and in the following year the Muslim scholar al-Shaykh Ahmed Abas al-Azhari founded his own school. By 1869 there were 75 schools in Beirut with almost 6% of the population enrolled in them (Issawi 1988), and by 1878 the number had increased to 92 (al-Mishkat 1878). Official Ottoman registers indicate that by 1894 the percentage of illiterate persons above the age of ten in the administrative district of Beirut had dropped to 34.72%, giving Beirut a rank of

23/36 in terms of the highest illiterate percentage in all Ottoman districts (Karpat 1985).

### **6 Founding Fathers**

Some of the newspapers were founded by organizations, but most were founded by individuals. All of the entrepreneurs except one were Christians. Why so? Social movement theorists have argued that social movements are formed by groups of people who are excluded from formal channels (Rao et al. 2000). A review of the literature concerning the Christians in the Ottoman Empire clearly shows that this was the case for them. According to Abu-Manneh (1980, p. 287), originally, religious identity was the basis of social hierarchy in the Ottoman Empire.

"In the ottoman system the population of the Empire was organized upon a confessional basis, not upon a territorial or linguistic one. It was composed of religious communities each of which had its own internal organization and was controlled by a religious hierarchy. Socially and culturally each community formed a separate entity, each kept apart from the other. There was no attempt to create uniformity." Muslim supremacy was clear in almost all aspects of the empire (Hourani 1957). Imperial decrees from the eighteenth century clearly state that Christians and Jews should have lower buildings than Muslims (Göçek 1996). The main requirement for joining the ranks of the rulers was religious affiliation (Göçek 1996; Masters 2004).

Although the Ottoman reforms of 1839 and 1856, which were referred to collectively as the Tanzimat, declared that all subjects were equal regardless of their religious affiliation, the stark reality continued to remain different (Masters 2004). In fact, the period in which the reforms were declared happened to witness a rise in sectarian tensions between Muslims and Christians, especially in Lebanon (Khalaf 1982; Maoz 1982). The Muslims were increasingly hostile to the Christians due to the fact that the new reforms had made them politically their equal while the Christians retained their economic supremacy thanks to their ties with the Europeans whose influence was constantly increasing.

The Christians, through their education, managed to secure jobs as scribes for the governments or translators for European consulates. However, none was able to rise to high places in the government bureaucracy. With rising hostilities and an inability to change the facts on the grounds through government participation and action, many Christians in the Ottoman Empire opted for a new way out: ethnic nationalism. This was most prominent among the Christian population in the Balkans. The Christians of the Arab-speaking Ottoman world responded quite differently:

Although sectarian unrest occurred in Egypt and the Fertile Crescent, Arabic-speaking Christian intellectuals and community leaders eventually were able to articulate several options with which to configure their political community as the empire collapsed under the weight of myriad ethnic antagonisms. Their choices were usually very different from those explored by their coreligionists elsewhere in the empire. This was due, in part, to the very

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crucial fact that Christian Arabs shared a common language and culture with their Muslim neighbors (Masters 2004, p. 8).

The Christians of Lebanon did not argue for separation from the Ottoman Empire, nor did they argue for "Christian rights". Instead, they argued for something that was in line with the Ottoman reforms, and that was Ottoman citizenship with no regards to religion, and they used newspapers to spread their ideas. One of the main advantages of newspapers was that they were written in the Arabic language, which both Christians and Muslims of Greater Syria shared. In this case, the language of the medium was in itself a message. Butrus al-Bustani argued that "Syria must not become a Babel of languages...as it is a Babel of religions and sects" (Abu-Manneh 1980, p. 291). Through newspapers, the Christians argued for education, because it defied religious boundaries.

### 7 The Framing Process

All of the newspapers seemed to agree on the source of the problem that was facing the nation as a whole, and that was lack of education among the people. In the first issue of Hadiqat al-Akhbar, the author thanks God for providing the people with a great Sultan such as the one that is sitting on the throne now and describes the age as the age of knowledge and science. He says that the sciences have been renewed in this age at the hands of the sultan. The author then asks the people to support this great government that wants to spread knowledge, the arts and civilization. The author says that the greatest aspect of this generation is the science that aims at making life easier. The article goes on to analyze the importance of science in civilization. As it turns out, the word civilization appears in most of the early newspapers. The founders of the newspapers make it clear that the goal of the nation should be to strive for civilization because only on that path can it achieve true progress. In the 22/4/1861 issue of Nafeer Souriya the author talks about civilization and its importance for society. This takes up half of the issue,

From the previous definition we can see that true civilization does not achieve its full potential and goal unless it was the cause of press, both physically and intellectually. This is so because if one was only concerned with the physically aspects then he would be nothing but an animal.

The author then talks about how the countries of the east were the center of civilization. The author then criticizes the fake civilization in which people merely imitate the habits and clothes of the foreigners. A similar article appears in the 3/4/1870 issue of al-Zahra. In the 15/6/1875 issue of Thamarat al-Funun the author asks,

What was it that caused the human race to break the shackles of ignorance and to become civilized and enlightened other than science?

The first issue of the al-Jam'iya al-'Ilmiya al-Souriya states that:

There is no doubt that if we were to contemplate what would cause us to rise after our fall, we find nothing more suited to the job than building schools and libraries followed by attending scientific organizations.

The 1/1/1870 issue of al-Zahra also states that its will to increase the spread of knowledge had led to its publication. In the 1/4/1878 issue of al-Mishkat the author starts by praising the administrative unit of Syria, and mentions that the governor of Syria told him that newspapers are one of the best methods to spread education.

We can see here clearly that education is mentioned as the sole solution to the problem facing the nation. Other newspapers identified the problems of the nation and linked them back to the fact that there was no education in their homeland. In the 26/6/1879 issue of al-Moktataf, for example, there is a letter that states that religious intolerance is the source of our problems. The solution to this, according to the first issue of the al-Jam'iya al-'Ilmiya al-Souriya, is science because it brings people together no matter their national or religious differences. This same argument is made in the 1/11/1870 issue of al-Jinan where the author says that knowledge will lead to a decrease in religious intolerance. It should be noted that religion itself was not viewed as a problem, but what was the problem was the mixing of the religious and political realms. This is explicitly mentioned in the 19/11/1860 issue of Nafeer Souriya where the author criticizes mixing the civil and the religious, but also criticizes the people for not being really religious. In the 22/2/1861 issue the author talks states that,

The civilized countries have experienced the damages caused by the mixing of the religious and political spheres and so have created a divide between the two.

The secular identity of the education which the newspapers sought was clearly illustrated in a debate between al-Bashir, the newspaper published by the Jesuits and the scientific newspaper al-Moqtataf. Al-Bashir had launched an attack on al-Moqtataf because the later had printed an article about the Catholic faith which al-Bashir considered to be a bad article. In its response, al-Motataf criticizes the "Jesuits sectarian newspaper" for launching an attack on "our scientific newspaper". Another example about how the newspapers linked most problems to the absence of science can be found in n the 8/1/1869 issue of the al-Jam'iya al-'Ilmiya al-Souriya where the author talks about how the French used scientific methods to advance the agriculture industry, which he considers to be the best of all industries. In the 4/4/1869 issue the author criticizes the current state of manufacturing in the Arab world and again argues that education provides the solution.

What role do newspapers play when it comes to education? As it turns out, the newspapers are seen, by their authors, as tools of education which are as important as schools and printing presses. According to the 22/4/1861 issue of Nafeer Souriya, the proper tools of civilization are: proper religion, political governance, and education (in which he includes newspapers), and trade. This is not the only place where we see that newspapers are included among educational institutes. In the 1/1/1871 issue of al-Jinan the author mentions newspapers along with schools when he is talking about the spread of education:

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Ignorance has been lifted from upon us in 1870, and schools and the sciences have increased, and the newspapers have spread everywhere.

Again, in the 2/4/1875 of Thamarat al-Funun the author starts by thanking God and praising the Sultan. He then mentions the newspapers along with schools and printing presses as proof that education is spreading:

The clearest proof of the generosity of the government is the founding of schools and printing presses, which are the source of knowledge, and the spreading of the newspapers that contain what has happened in the morning and night.

In the 1/10/1870 issue of al-Jinan there is a letter from the ruler of Mount Lebanon to al-Jinan in which he subscribes to the newspaper for a school so that the children will read it in order for them to gain knowledge and to love the government. In the 6/10/1877 issue of Lisan al-Hal the author starts by thanking God and the Sultan, and then states that newspapers are among the best tools for obtaining education. In fact, in the emergence period, the authors explicitly mention education as the goal of newspapers and not the reporting or analyzing of news items. The first issue of Thamarat al-Funun states that:

It is not hidden that the newspapers of this age are the cause of progress...because they spread the good deeds of the good people and the bad deeds of the bad people...and it presents to you feasts of useful information.

In the 11/5/1870 issue of al-Nahla the author starts by thanking God. He then mentions the other newspapers favorably and states that they have managed to defeat the armies of ignorance and fix what has been ruined. In the 1/1/1870 issue of al-Jinan the author also states that the main purpose of starting the newspaper is the spread of knowledge and scientific facts. In the 1/6/1876 issue of al-Moktataf, the author says that he has started the newspaper as a service to his country because it will spread useful knowledge. Again he also mentions that knowledge is the solution to the various problems that face the homeland.

The main motivation method used by the newspapers was to remind the people of the glorious past of their nation and promise them that through education, more specifically through newspapers, they can reclaim what they have lost. In the first issue of Hadigat al-Akhbar, the author reminds the people of the past glorious days of this part of the world and argues that they could repeat their previous success with the aid of education. In the 22/4/1861 issue of Nafeer Souriya the author reminds the people of the glorious past and argues that they can reclaim their place among advanced nations. In the first issue of al-Jam'iya al-'Ilmiya al-Souriya the author also praises the past history of the Arabs and asks why the Arabs don't use science today to emulate their predecessors. The issue talks favorably about the past and critically about the present situation of the Arabs. The 10/4/1868 issue of the same newspaper also glorifies the history of the Arabs at a time when the Europeans where fighting barbarically. The same issue has a poem which says that Beirut has been dark because of the absence of science, but that it is now a shining planet thanks to the efforts of Sultan Abd al-Azizi. In the 4/4/1869 issue there is an article which considers the history of Great Syria to be a glorious one and argues that the West has taken their culture from Syria when they occupied it in the past. These same ideas are reflected upon in most of the other newspapers. In the 1/1/1870 issue of al-Jinan the author states that the rays of knowledge were first emitted by the East towards the West which has used this knowledge well. In the 1/3/1870 issue of Hadiqat al-Akhbar the author asks if the Arabs will one day return to their glory and answers that it is inevitable that time will take us back to what politics has ruined. In the 15/2/1876 issue the author says:

If we were to ask history about our past we would see the beauty which was...we have now stripped our nation from this beauty...I doubt that there is anyone among us who does not acknowledge the fact that we are in retreat and we have let go of what causes our progress...The progress of our homeland is dependent on love, science, and industry.

#### In the 15/11/1878 issue the author says:

Science is the best thing that we have, and the scientists are the heirs of the prophets. We have not done a tenth of what any civilized nation should do in order to preserve the sciences which our ancestors have nourished and delivered to the Europeans who we have now made our idols.

In the 12/8/1878 issue of Lisan al-Hal the author argues that racial differences do not matter when it comes to education. What matters are the tools that each nation has. In one case, in the 6/3/1862 issue of Hadiqat al-Akhbar, the author talks about some financial troubles that al-Jawa'ib was going through. He then blames the people for not buying the newspaper in large quantities and criticizes them for not supporting something which is a sign of civilization.

This emphasis on education and progress is even reflected in the names of the newspapers. Table 1 shows the names of these newspapers in Arabic and the translation to English. Interestingly, only one newspaper had a title that was the name of a geographic area. A recurring theme in the names of the newspapers is the idea of a paradise of knowledge. The word heaven appears in the names of three newspapers. We see that one newspaper is named "The garden of the news". The founder of this newspaper had intended to name it "The Shining Dawn". Another newspaper is named "the Flower" while another is named "the Bee". In the first issue of "the Bee", the author talks about how he intends for his newspaper to act like a bee and fly from flower to flower (in reference to other newspapers) picking the best from each. We can also see a newspaper named "Fruits of Knowledge". In the 15/11/1870 issue of al-Jinan, there is a poem which praises the newspaper by comparing it to a paradise which contains the most delicious fruits and a river of knowledge. In the 15/7/1876 issue of the same newspaper there is a letter written to the newspaper that says:

...and the gardener would open up his heavens and we would enter into them while enjoying the breeze and the taste of their fruits and drink from the water of literature which bursts from the fountains of wisdom and acumen so that we shall never go thirsty again.

We can see that newspapers were thought of as a garden that contained fruits. These fruits represented the knowledge contained within the newspaper. I inspected the names of all newspaper published between 1880 and 1890. There were a total of

**Table 1** Names of the early newspapers

Name (Arabic)	Name (English)	Name (Arabic)	Name (English)
حل المسألتين الشرقية و الغربية	The solution to the eastern and western question	اخبار طبية	Medical news
العالم أخبار عن انتشار الانجيل في	News about the spread of the Bible around the world	كوكب الصبح المنير	The planet of the shining morning
النشرة الاسبوعية	The weekly bulletin	لبنان	Lebanon
البشير	The Herald	لسان الحال	Voice of the present
التجارة	Trade	المجمع الفاتيكاني	The Vatican composite
التقدم	Progress	مجموع الفوائد	Collected useful lessons
ثمرات الفنون	Fruits of knowledge	اعمال الجمعية العلمية السورية	The works of the scientific Syrian society
الجنان	Gardens	المشكاة	The niche
الجنة	Paradise	المقتطف	Selections
الجنينة	Little garden	المهماز	The spur
حديقة الأخبار	The garden of news	النجاح	Success
الزهرة	The flower	النحلة	The bee
الشركة الشهرية	The monthly corporation	نفير سورية	Syrian clarion

Source: Author's own data

14 newspapers founded in Lebanon during that period. None of the names of these newspapers referred to a garden or a paradise. As I argue next, the reason for this is that the newspaper industry matured during the end of the 1870s and the founders re-framed their movements and re-defined their goals.

While identifying education as their goal, the early newspapers constantly stressed the importance of the Arabic language. As mentioned in the section that dealt with the founding fathers, language was the crucial factor in the adoption of a secular ottoman citizenship by the Christians of Lebanon. By stressing the importance of language, the founders of the newspapers, who were mostly Christians, were strengthening the bonds between them and their Muslim compatriots. Language, just like education, transcended the religious boundaries. In the first issue of Nafeer Suriya, Butrus al-Bustani, in asking the people to unite and to abandon animosities, states that a single language binds the people. It was common for newspapers to include translated novels in their issues, either on the lower half of the first page or on the last page. The son of Butrus al-Bustany, Salim, constantly translated European novels to the Arabic language and printed them in A'mal al-Jam'iya al-'Ilmiya al-Suriya and in his father's magazine al-Jinan. In the 5/12/1868 issue of A'mal al-Jam'iya al-'Ilmiya al-Suriya, one of the reasons he gave for

this was that he wanted the people to remain interested in the Arabic language. Newspapers also contained many poems and in some instances these poems appeared on the first page of the newspaper. Half of the 3/5/1868 issue of A'mal al-Jam'iya al-'Ilmiya al-Suriya is a poem. Articles that explained some vague points in Arabic grammar also constantly appeared in the newspapers. The discussions regarding the Arabic language turned into a heated debate when the newspaper al-Jawa'ib, which was published by a Lebanese in Turkey, decided to write a critique of some of the literary works of the famous Arabic poet Naseef al-Yazaji. Naseef's son, Ibrahim, responded to these critiques on the pages of al-Jinan. Given all of the above, we would expect that a considerable proportion of the newspapers to be dedicated to issues that dealt with the Arab language. Almost one quarter of the 4/3/ 1868 issue of the scientific magazine A'mal al-Jam'iya al-'Ilmiya al-Suriya was occupied by either poems, translated novels or technical articles dealing with Arabic grammar. Almost one full page out of a total of four in the 4/12/1858 issue of Hadiqat al-Akhbar was also taken up with such subjects as well. Of course, there were instances in which there was nothing that dealt with the Arabic language, like the 3/5/1860 issue of Hadigat al-Akhbar, but in general the proportion dedicated to such issues took was considerable.

### **8** The Re-framing Process

Around the middle of the 1870s, the framing process utilized by the newspapers starting shifting from talking about the need for education and started talking about the need for political reform. In fact, the newspapers redefined their goal as being one of delivering and analyzing news, in place of the older educational role. In the 1/9/1875 issue of al-Jinan we see one of the first acts of this re-framing process. The author talks about the importance of newspaper in analyzing events so that the average person would be aware of what is going on. By 1877 we start seeing more of this new goal orientation in more than one paper. In the 15/4/1877 issue of the same paper the author says:

The printed material in general, and the political, scientific, reformative, industrial and medical newspapers in particular are the cause of the spread of knowledge. This knowledge is the foundation upon which progress and growth form. And they are among the greatest methods with which a nation is to be aware of its rights and wrongs, and to project its needs and to preserve its rights from the trespassing of the officials. The freedom of the press is a proof of the advance of any nation.

In the 15/6/1879 issue of the same newspaper there is an article about freedom of the press. Newspapers, according to the author, scrutinize the working of the government officials and so officials have to be careful and alert:

The newspapers seek to inform the public about the intentions of the government, while also informing the government of the needs of the people. . One of the greatest and most critical of issues is that which relates to the freedom of the press.

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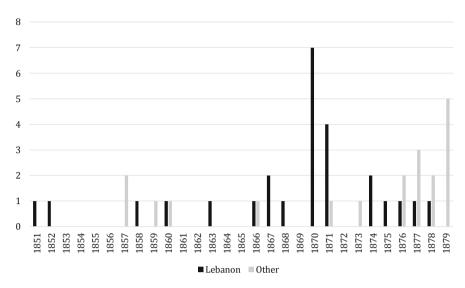


Fig. 2 Newspaper founding events up to 1879. Source: Author's own study

Again, in the 17/11/1879 issue of Thamarat al-Funun the author criticizes the suspension of a newspaper in Aleppo and declares that this is tantamount to a declaration of tyranny. Such language was absent previously although many newspapers were suspended for different reasons. In the 15/1/1879 issue the author says that reforms should be concentrated on spreading knowledge and differing viewpoints and questioning officials through freedom of speech and newspapers. This same idea is reflected in the 15/12/1879 issue of Thamarat al-Funun where the author defends the role that his newspaper is playing by stating that the job of newspapers is to inform the public about government actions and critically observing their implementation:

The job of the newspapers is to inform the people of the sources of such actions and to state the available resources and to highlight what good has been done.

If we look at Fig. 2 we can see that around the time that the newspapers were going through this re-framing process, the number of founding events in Lebanon decreased while the number of founding events outside Lebanon by Lebanese founders increased. Industry historians [e.g. al-Rifa'i (1967), Tarazi (1933), Ayalon (1995)] have unanimously argued that the ascension of Sultan Abd al-Hamid to the throne resulted in the persecution of the newspapers. In fact, the total number of newspapers in the Ottoman empire declined after the arrival of the new sultan (Göçek 1996). While there is no doubt that the new sultan was less tolerant than his predecessors, the re-framing process itself also caused some of the damage that was to come. In order to investigate this, I sampled one issue per month of each newspaper from 1851 until the end of 1879. The total issues sampled were 659 with a total of 9826 pages. Of course, these pages differed in size. Some were A4 sizes, others were close to the sizes found in daily newspapers today. I then used content

**Table 2** Breakdown of the references to the government

Year	Both	Supportive	Critically	None
1851	0.00	0.00	0.00	100.00
1852	0.00	0.00	0.00	100.00
1853	0.00	0.00	0.00	100.00
1854	0.00	0.00	0.00	100.00
1855	0.00	0.00	0.00	100.00
1856	0.00	0.00	0.00	100.00
1858	0.00	83.33	0.00	16.67
1859	0.00	41.67	0.00	58.33
1860	0.00	50.00	0.00	50.00
1861	0.00	86.67	0.00	13.33
1862	0.00	90.91	0.00	9.09
1863	0.00	83.33	0.00	16.67
1864	0.00	92.31	0.00	7.69
1865	0.00	87.50	0.00	12.50
1866	0.00	45.00	0.00	55.00
1867	0.00	83.33	0.00	16.67
1868	0.00	40.00	0.00	60.00
1869	0.00	40.00	0.00	60.00
1870	0.00	50.00	0.00	50.00
1871	0.00	25.00	4.17	70.83
1872	0.00	26.19	0.00	73.81
1873	0.00	31.91	0.00	68.09
1874	6.35	23.81	1.59	68.25
1875	0.00	29.31	0.00	70.69
1876	0.00	36.36	0.00	63.64
1877	0.00	51.72	0.00	48.28
1878	1.56	28.12	1.56	68.75
1879	3.23	32.26	1.61	62.90

Source: Author's own study

analysis in order to code the data (Riffe et al. 1998). Specifically, I went through the issues to see any references to the authorities and coded a variable as "Supportive" if all references in the issue were positive, "Critically" if all references were negative, "Both" if the same issue contained positive and negative references, and finally "None" if there was no references whatsoever or if the references were neutral in that they did not criticize nor support the government. Table 2 shows the result with the cells representing percentages. We notice that up to 1870 there was no critical reference to the government in any newspaper. In addition, there were much more positive references than no references at all. In the lower bottom of the table we see that some issues both criticize and support the government while a small number only criticize the government. Also noticeable is the fact that the number of issues that do not mention the government is around the same as the number of positive references. The table shows us clearly that the newspapers have started operating

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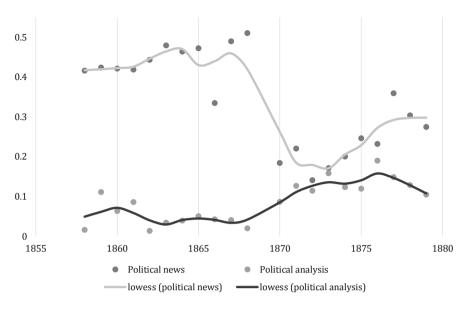


Fig. 3 Political content analysis excluding the scientific newspapers. Source: Author's own study

differently than before. This happens around the same time as the re-framing process mentioned above. Therefore, it seems that the newspapers started looking at the government in a more critical way. Was this manifested in a way other than the mentioning of the government?

In addition to coding the above variable, I coded two more variables. The first reflected the amount of space taken up by political news and the second reflected the amount of space given to political analysis. The variable political represented factual information while the variable political analysis represented pieces in which the author gave his (there were no females in the industry at that time) opinion what had happened or what was about to happen. Based on the re-framing process described above, we would expect that the amount of analysis increase over time. If so, then this would indicate that the population was certainly maturing in both their new goals and in the methods implemented to reach these goals.

Figure 3 shows the scatter plot of the total amount of space dedicated to each category over the years 1851–1879. The figure also shows the loess graph of both variables. I did not include the purely scientific newspapers in this graph because we are interested in the change between the two political variables. The scientific newspapers would not contribute to this change. This way we can see how the newspapers that dealt with all topics, or at least political issues, changed their structure. This graph clearly shows that the political analysis sections of the newspapers took space away from the political news. Since space is a zero sum game, if one increases then the other decreased. The two loess graphs appear to move in harmony. In addition, we can see that at the far end of the graph the dynamic starts to

reverse. The persecution of the newspapers led to many newspapers closing down, changing their content, or in some cases, moving to Egypt.

We can conclude from the above analysis that the re-framing process, along with the rise of Abd al-Hamid, had severe consequences. Previous studies only discussed the effect that the new Sultan had on the wellbeing of the industry. The evidence shown here gives us a new perspective on the issue. In addition to a sultan with an oppressive nature, the newspapers suffered because they had matured. They no longer had a view of themselves as being a paradise to which the reader was invited. They now demanded a more serious role, one that enabled them to question the government's actions and intentions. This was reflected in their definitions of the newspaper's goals as well as in the type of content that they published. As long as they were regarded as educational tools the government did not suppress them, but once they matured the government's response changed. The mere act of criticizing the government does not in itself constitute a re-framing process for newspapers. A change in the nature of the regime or a change in the economic or cultural aspects of society might entail a change in the way that newspapers approach their subject matter. If so, then such a change does not warrant to be labeled as a "re-framing process". The situation highlighted by the above discussion is quite different though. First of all Table 2 and Fig. 3 show that there was a change just after the beginning of the 1870s. Newspapers started analyzing events more than before and favorable mentions of the government started to decrease. Second, we have seen that around the same period newspapers started defining their goals in a completely different way. Newspapers were less regarded as tools of education and more regarded as tools to monitor government functioning. This was also reflected in the names of the newspapers that no longer reflected the image of a garden or paradise. These changes in the industry were not a result of a change in the environment. No major events took place around that period that would cause the newspapers to be less pleased with the government than before. There were also no significant economic or cultural shifts. The Ottoman government was in a state of steady decline, but this had been the case for tens of years as shown in the history section of this paper. Finally, while the era of Abd al-Hamid was to prove to be severely restricting, this was not the case from the beginning of his ascension. Abd al-Hamid had been put on the throne because the bureaucrats believed that his predecessor was not responding properly to challenges. Abd al-Hamid had pledged to modernize the empire as a precondition for his becoming the new sultan. In fact, one of his first acts was the declaration of the constitution and parliament. This is why this paper argues that the re-definition of the goals and the re-structuring of the contents of the newspapers were a result of a re-framing process undertaken by the newspapers themselves, and not the result of macro-events. According to Hannan and Freeman (1984) core changes cause an increase in organizational mortality. It has been shown by Minkoff (1999) that these core changes have a significant, and negative, impact on social movements. The re-framing process discussed above is clearly a case of a change in a "core feature" since it modifies the current identity (Hannan et al. 2006) and it resulted in a significant negative impact on the newspaper industry as can be seen from Fig. 2.

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## 9 Discussion and Conclusion

Social movement scholars have studied the framing process in which social movements alert their audience to problems, propose a solution, and provide the necessary motivation. Two groups have emerged as a result of this question, where one argued that the intensification micro-level grievances were the trigger while the other group argued that macro-level resource-mobilization considerations were the central actor, with grievances being used merely as tools.

This paper has showed that the newspaper industry in Lebanon, in its early formation days, constituted what is regarded as a social movement. Industry members have stated that the nation faces the problem of falling behind when it comes to civilization economically, politically and culturally. They proposed that the only solution to this problem was the spreading of education and argued that newspapers were one of the most important tools in doing so. Finally the newspapers have motivated the people by arguing that the previous glory days of the East can be repeated through this strive for education. Most of the newspapers have ascribed to themselves the role of educational. In this regard, this paper has shown that the newspapers have projected a unified identity to their audience members in that they clearly had the same tools and the same goals.

Olzak and Uhrig (2001) state that the historical and social context of social movements matter and that any study of social movements needs to take them into consideration. This is certainly true in the case of the Lebanese newspapers industry. While Olzak and West (1991) found that an increase in ethnic conflict led to the founding of ethnic newspapers in the U.S., this paper has shown that an increase in religious conflict led to the emergence of newspapers which argued against religious divisions and instead opted for a secular ottoman identity.

In addition, this paper has contributed to the micro-macro debate by showing that in the case of the Lebanese newspaper industry neither of the competing explanations provides an adequate explanation on its own. Prior to the formation of the industry the Lebanese landscape witnessed severe changes in both the grievances faced by the people and the resources made available to them. The arrival of the missionary groups and the subsequent introduction of the printing press and modern educational institutions were accompanied by the dissolving of the old stable social hierarchy and the creation of a new one in which sectarian identities were brought to the forefront. This new social system was the source of much of the population grievances. The place in which these dynamics mixed the most was in the coastal city of Beirut. Beirut was gradually emerging as the new political, economical and cultural center of Lebanon due to the introduction of European capital, and the demographic change which was caused by Christians escaping their persecution at the hands of the more powerful Druze landlords. It was around that time that the Christians of Lebanon launched their newspapers in the language which was common to them and the Muslims. These newspapers stressed the importance of the Arabic language. The two main concerns of the newspapers, education and the Arabic language, were the two forces which these Christian founders used to create a unity which was more inclusive to them than the Islamic identity of the empire.

### References

- Abu-Manneh, B. (1980). The Christians between Ottomanism and Syrian nationalism: The ideas of Butrus al-Bustani. *International Journal of Middle East Studies*, 11(1), 287–304.
- al-Mishkat. (1878, September 15). Beirut. al-Mishkat, 59-60.
- al-Rifa'i, S. (1967). The history of the Syrian and Lebanese press. Paris: Asmar.
- Astley, W. G. (1985). Administrative science as socially constructed truth. *Administrative Science Quarterly*, 30(4), 497–513.
- Ayalon, A. (1995). The press in the Arab Middle East: A history. New York: Oxford University Press
- Benford, R. D. (1997). An insider's critique of the social movement framing perspective. *Sociological Inquiry*, 67(1), 409–430.
- Benford, R. D. (2005). You could be the hundredth monkey. *The Sociological Quarterly*, 34(1), 195–216.
- Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology*, 26(1), 611–639.
- Buheiry, M. R., & Conrad, L. I. (1989). *The formation and perception of the modern Arab world*. London: Darwin Press.
- Cohen, J. L. (1985). Strategy or identity: New theoretical paradigms and contemporary social movements. *Social Research*, 52(4), 663–716.
- Fawaz, L. T. (1983). Merchants and migrants in nineteenth-century Beirut (Vol. 18). Cambridge, MA: Harvard University Press.
- Göçek, F. M. (1996). Rise of the bourgeoisie, demise of empire: Ottoman westernization and social change. New York: Oxford University Press.
- Goffman, E. (1974). Frame analysis: An essay on the organization of experience. New York: Harvard University Press.
- Hannan, M. T., Baron, J. N., Hsu, G., & Koçak, Ö. (2006). Organizational identities and the hazard of change. *Industrial and Corporate Change*, 15(5), 755–784.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. American Sociological Review, 49(2), 149–164.
- Hourani, A. (1957). The changing face of the Fertile Crescent in the XVIIIth century. Studia Islamica, 8, 89–122.
- Illias, J. (1997). The Lebanese press: A picture dictionary 1858–1958. Beirut: Dar Al-Nidal.
- Issawi, C. (1978). The transformation of the economic position of the millets in the nineteenth century. Princeton, NJ: Princeton University.
- Issawi, C. (1988). The fertile crescent 1800-1914. New York: Oxford University Press.
- Jenkins, J. C. (1983). Resource mobilization theory and the study of social movements. *Annual Review of Sociology*, 9(1), 527–553.
- Karpat, K. H. (1985). Ottoman population, 1830–1914: Demographic and social characteristics. Wisconsin: University of Wisconsin Press.
- Khalaf, S. (1982). Communal conflict in nineteenth-century Lebanon. *Christians and Jews in the Ottoman Empire: The Functioning of a Plural Society*, 2, 107–134.
- Lounsbury, M., Ventresca, M., & Hirsch, P. M. (2003). Social movements, field frames and industry emergence: A cultural–political perspective on US recycling. *Socio-Economic Review*, 1(1), 71–104.
- Lowthian, J., Elijah, G. S., & Soloman, S. (1856). Narrative and report regarding Lebanon Schools, Superintended by John Lowthian, Esq., of Carlton House. Lebanon: Carlisle.

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Makdisi, U. (2000). The culture of sectarianism: Community, history, and violence in nineteenth-century Ottoman Lebanon. Berkeley, CA: University of California Press.

- Maoz, M. (1982). Communal conflict in Ottoman Syria during the reform era: The role of political and economic factors. Princeton, NJ: Princeton University.
- Masters, B. (2004). *Christians and Jews in the Ottoman Arab world: The roots of sectarianism*. Cambridge: Cambridge University Press.
- McAdam, D., & Scott, W. R. (2005). Organizations and movements. In G. F. Davis, D. McAdam, W. R. Scott, & M. N. Zald (Eds.), Social movements and organization theory (pp. 4–40). New York: Cambridge University Press.
- McCarthy, J. D., & Zald, M. N. (1977). Resource mobilization and social movements: A partial theory. *American Journal of Sociology*, 82(6), 1212–1241.
- Minkoff, D. C. (1997). The sequencing of social movements. *American Sociological Review*, 62(5), 779–799.
- Minkoff, D. C. (1999). Bending with the wind: Strategic change and adaptation by women's and racial minority organizations. *American Journal of Sociology*, 104(6), 1666–1703.
- Navis, C., & Glynn, M. A. (2010). How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990–2005. Administrative Science Quarterly, 55(3), 439–471.
- Olzak, S., & Uhrig, S. N. (2001). The ecology of tactical overlap. *American Sociological Review*, 66 (5), 694–717.
- Olzak, S., & West, E. (1991). Ethnic conflict and the rise and fall of ethnic newspapers. *American Sociological Review*, 56(4), 458–474.
- Owen, R. (1993). The Middle East in the world economy, 1800–1914. London: IB Tauris.
- Rao, H., Morrill, C., & Zald, M. N. (2000). Power plays: How social movements and collective action create new organizational forms. *Research in Organizational Behavior*, 22, 237–281.
- Riffe, D., Stephen, L., & Frederick, F. (1998). Analyzing media messages: Using quantitative content analysis in research. New York: Routledge.
- Sabat, K. (1958). The history of the printing press in the Arab Middle East. Egypt: Dar al-Ma'aref.Salibi, K. S. (1988). A house of many mansions: The history of Lebanon reconsidered. London: IB Tauris.
- Santos, F. M., & Eisenhardt, K. M. (2009). Constructing markets and shaping boundaries: Entrepreneurial power in nascent fields. *Academy of Management Journal*, 52(4), 643–671.
- Snow, D. A., & Benford, R. D. (1988). Ideology, frame resonance, and participant mobilization. International Social Movement Research, 1(1), 197–217.
- Snow, D. A., & Benford, R. D. (1992). Master frames and cycles of protest. In A. D. Morris & C. M. Mueller (Eds.), Frontiers in social movement theory (pp. 133–155). New Haven, CT: Yale University Press.
- Snow, D. A., Rochford, E. B., Jr., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51 (4), 464–481.
- Snow, D. A., & Soule, S. A. (2010). A primer on social movements. New York: W.W. Norton & Company.
- Snow, D. A., Soule, S. A., & Kriesi, H. (Eds.). (2008). The Blackwell companion to social movements. Malden, MA: Blackwell Publishing.
- Swaminathan, A. (2001). Social movement theory and the evolution of new organizational forms. In C. B. Schoonhoven & E. Romanelli (Eds.), *The entrepreneurship dynamic in industry evolution* (pp. 286–313). Stanford, CA: Stanford University Press.
- Tarābulsī, F. (2007). A history of modern Lebanon. New York: Pluto.
- Tarazi, F. (1933). The history of the Arab press. Beirut: Dar Sader.
- Touraine, A. (1985). An introduction to the study of social movements. *Social Research*, 52(4), 749–787.

- Weber, K., Heinze, K. L., & DeSoucey, M. (2008). Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly*, 53(3), 529–567.
- Wry, T., Lounsbury, M., & Glynn, M. A. (2011). Legitimating nascent collective identities: Coordinating cultural entrepreneurship. *Organization Science*, 22(2), 449–463.
- Zald, M. N., & McCarthy, J. D. (Eds.). (1987). Social movements in an organizational society: Collected essays. New York: Transaction Publishers.

# Determining Reverse Logistics Motivation Factors and Barriers: Multiple Criteria Decision Making Application on Pipe Manufacturing Company



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**Abstract** In a climate of scarcity of natural resources and growing populations, changing and increasing demand for products has brought a new perspective to supply chain and business management. Governments and customers demand to know how raw materials are extracted, where and how they are delivered, how they are produced and how they are distributed. As a result, businesses experience pressure on how conform to environmental regulations and standards and consumers and shareholders have questions about environmental responsibility. Green and closed-loop supply chains, which are also related to the subject of reverse logistics, are linked to industrial ecology and are considered a prerequisite of sustainability. As a subject of this paper, reverse logistics are viewed as a part of environmental sustainability that is gaining increased attention. In reverse logistics practices there are motivation factors that affect business but also some problems that need to be addressed. Not all the driving factors and problems have equal importance and power, so it is a necessity to unearth which factors are important or dominant as drivers and barriers. In this study, after implementing AHP in pipe manufacturing company, obligatory reasons, customer demand and enhancing corporate image were found to be the most primary drivers that enable reverse logistics practices. Legal issues, lack of trained human resources and low product quality were identified as the most important problems/barriers in practice and so provide a road map and solutions that can be implemented on a priority basis.

**Keywords** Reverse logistics  $\cdot$  Motivation factors  $\cdot$  Barriers  $\cdot$  Multi criteria decision method  $\cdot$  Analytic hierarchy process (AHP)  $\cdot$  Turkey

## 1 Introduction

After the advent of globalization, global trade and global supply chains, logistics has become a very important process in the supply chain that includes material handling, warehousing, inventory management and transportation functions. Forward logistics aims to manage the flow of things (raw materials, parts or finished goods) from the point of origin to the end customer. In the opposite direction, reverse logistics manages the product to capture the value or arrange proper disposal and is defined as the role of logistics in recycling, product returns, material substitution, waste disposal, source reduction, reuse of materials and refurbishing, and repair and remanufacturing (Stock 2001). As another definition, reverse logistics is the process of planning, implementing and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal (Rogers and Tibben-Lembke 1998). This process includes product return and product recovery and includes the steps of collection, disassembly and reassembly of the returned product and later the distribution and sale of the recovered product (Ye et al. 2013). Typical reverse logistics processes can be seen in Fig. 1. Reverse logistics can minimize the environmental impact by resource minimization, reduce the product's end of life environmental burden (Prakash and Barua

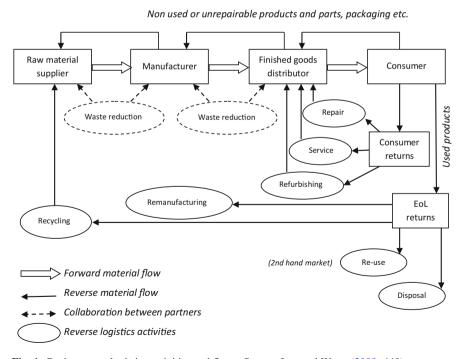


Fig. 1 Basic reverse logistics activities and flows. Source: Lau and Wang (2009: 449)

2015) and reduce the impact of pollution (Vahabzadeha et al. 2015). From the perspective of business, reverse logistics also provides competitive advantage by improving customer satisfaction, improving the firm's corporate citizenship (Olorunniwo and Li 2010: 455), improving resource productivity (Ye et al. 2013), enhancing the firm's reputation and reducing cost (Srivastava 2008).

Reverse logistics is not symmetric with forward logistics (Fleischmann et al. 1997a, b); it is more complicated and requires special attention (Srivastava 2008). Implementation of reverse logistics is a strategic decision that has a long lasting effect (Ravi and Shankar 2015) and requires assessment of a broad set of criteria, including strategic, operational, tangible and intangible dimensions (Presley et al. 2007). Reverse logistics is a sophisticated process because it requires a lot of dynamic decision making and high levels of planning regarding assessment of the returned product's properties, the recovery option to be used, transportation management, warehouse handling, gathering information about the returned product and other related issues (Sharma et al. 2011). For successful reverse logistics applications, firms have to realize the driving factors and benefits and understand the problems and barriers that may hinder reverse logistics activities.

Whereas there are some studies about building reverse logistics systems that also cover barriers and drivers of reverse logistics, to the best of our knowledge there is not enough research about the situation in Turkey as a developing country (e.g. Akdogan and Coskun 2012; Erol et al. 2010; Gilanli et al. 2012) where legislation, technology, company culture, infrastructure and public awareness may differ from other countries. Green initiatives are not easy to implement and are still in a state of infancy (Bouzon et al. 2018) in emerging countries because of the absence of societal pressure and insensitivity towards environmental issues, price sensitive markets (Jindal and Sangwan 2011) and environmental regulations. As the sector changes, different products and components, different hazardous effects on the environment, different options for the returned product, and different priorities, expectations and laws about environmental applications and reverse logistics practices may be experienced. As a result, careful selection of a sector to explore is a necessity. In this paper, due to recycling operations, the plastic sector has been chosen. Thus this paper provides a particular study that explores the driver factors and problems for the pipe manufacturing sector in Turkey. The aim of the study was to identify the obstacles and primary drivers of reverse logistics. To determine the forces and problems, interviews were conducted with experts from the sector and academia and the regulations, influential actors in the supply chain, economic results of activities, technical difficulties, organizational structure, and the network were investigated.

The remainder of the paper proceeds as follows. Section 2 reviews the reverse logistics literature and explains detailed the drivers and problems of reverse logistics. Section 3 proposes the approach of the Analytic Hierarchy Process and its application for the pipe manufacturing company. The results and managerial implications are given in Sect. 4.

## 2 Literature Review

In one of the first literature reviews of reverse logistics, Carter and Ellram (1998) identified the driving forces as customers, competitors, governmental agencies and suppliers. In their paper, constraints are listed in order as top management support, stakeholder commitment, quality of inputs, vertical coordination and incentive systems. There are many papers that aim to determine the important points of reverse logistics, the drivers that motivate firms and the problems that businesses face in dealing with them. Some example papers related to reverse logistics and its driving factors and barriers are provided.

Hall et al. (2013) looked at the defence industry and established a content analysis to categorize the goals, challenges and metrics of reverse logistics. Kapetanopoulou and Tagaras (2011) investigated product recovery activities and the drivers and problems facing Greek industry in their survey. Another paper related to determining the barriers and drivers in product recovery is that of Rahimifard et al. (2009). The paper analyzed applications and cases in the UK. Chileshe et al. (2016) focused on the construction industry in Australia to determine the drivers that enable reverse logistics practices. They conducted semi-structured interviews with eight practitioners. Andic et al. (2012) investigated the suitability and significance of waste management as part of green supply chains in Turkey. In extension, they also focused on some questions such as the starting point of becoming green, the level of environmental awareness of firms and ways to increase it. The study was conducted with eight general managers of electrical and electronic equipment companies.

In their literature review, Agrawal et al. (2015) analysed many subtitles in reverse logistics. They also reviewed the papers related to the drivers and challenges of reverse logistics. As drivers, the most often mentioned are economic factors, legislation, environmental and green issues, customers, and social needs. The most quoted factors in the extant literature on barriers to reverse logistics are the lack of commitment of customers and managers, company policies, financial constraints, poor performance of the management system, lack of human resources, and lack of systems. Bouzon et al. (2015) intended to identify the drivers of reverse logistics in Brazil as an example of an emerging economy. They studied a manufacturing company as an example. Sharma et al. (2011) used Interpretive Structural Modelling to determine the barriers in India as a developing country. Lack of systems, top management's disregard, financial and personal resources and company policies are some of the barriers to reverse logistics. In another paper, Bouzon et al. (2018) employed Grey-DEMATEL in Brazil with three experts to evaluate the barriers and their interrelationships from the stakeholders' perspectives.

Hsu et al. (2013) conducted their studies on ISO 14001 certified companies in Malaysia to identify the green initiatives drivers. They used regulatory measures, customer and competitor pressures and responsibility factors in their model. Ho et al. (2012) applied a survey of Hong Kong manufacturing companies to understand the effects of internal and external factors, company properties and recognition and

perception degrees on reverse logistics practices. In their paper, Ye et al. (2013) investigated the influence of three institutional pressures (namely customer, competitor and government) on top management postures based on survey data in China.

With the aim of determining critical success factors for reverse logistics, Mangla et al. (2016) employed AHP to assess the priorities of factors and DEMATEL to categorize the causal relationships between them. Thiyagarajan and Ali (2016) analysed reverse logistics barriers in the online retail industry. Reverse logistics is important for the retail industry because the transaction frequency and amounts are very high. They employed ANP to determine the barriers. In their model, Sarkis et al. (2010) investigated the influence of customers, workers, society, shareholders and the government on environmental activities.

In general, it can be said that there are many papers (written in 2015 and 2016) about understanding a firm's barriers and the benefits regarding reverse logistics. Such studies should be made in different sectors because every product has a different environmental effect, different product recovery options, different costs and different legislation. Furthermore, the studies began in developed countries but these analyses are now also being made in developing countries. We can see some examples from China, Malaysia, Greece, Brazil etc.

#### 2.1 Drivers in Literature

Usually, economic, regulatory and consumer pressures are seen as the most important motivation factors worldwide (Srivastava and Srivastava 2006). In addition, there may be many different reasons to apply reverse logistics practices. For example, in their case study Lau and Wang (2009) found the reasons behind implementing reverse logistics to be sharpening competitiveness, reducing costs, improving customer satisfaction, complying with laws and regulations, responding to local government support, and achieving material reuse and energy conservation. Pokharel and Mutha (2009) mainly focused on legislation, directives, consumer awareness and the firm's social responsibilities. De Brito and Dekker (2003) identified three groups of drivers as economic, environmental/social and legal. In their paper, Mollenkopf et al. (2007) specified return management benefits as profitability, relationships with customers, and the firm's reputation.

First of all, reverse logistics may provide direct and indirect financial benefits. Using returned and recovered material allows firms to use fewer raw materials and to reduce the disposal cost. This is an example of direct economic benefit. Preparing for future environmental regulations, improving company image, and protecting product technology from competitors by salvaging one's own products may be seen as indirect economic benefits (de Brito and Dekker 2003). Extended product life cycles and lower customer prices may be seen as additional cost saving benefits of reverse logistics (Kapetanopoulou and Tagaras 2011). Also, extended producer responsibility allows for economic efficiency so firms encounter additional economic benefits.

However, not all take-back programs are profitable; for example, Dell's reverse logistic network was not designed to provide profit (Kumar and Putnam 2008).

As a result of environmental issues such as waste during production and after-use, limited resources and raw materials and the environmental effects of manufacturing such as hazardous materials, waste and pollution, companies have environmental concerns (Ravi et al. 2005; Mutha and Pokharel 2009; Kannan et al. 2010). Reverse logistics provides options to recover the product (reuse, repair, restore, remanufacture, recycle). The process helps in the conservation of used materials and energy and reduces the environmental deterioration caused by waste.

Social responsibility or corporate citizenship includes a range of values and principles that seem responsible and motivate the company to apply reverse logistics (de Brito and Dekker 2003; Bouzon et al. 2015) and is a powerful driver for reverse logistics applications (Ravi et al. 2005; Shaik and Abdul-Kader 2014). Producer's responsibility owing to environmental regulations or as a broader term extended producer responsibility may become a driver factor that enables reverse logistics practices, product recovery and recycling (Kumar and Putnam 2008; Rahimifard et al. 2009; Lau and Wang 2009).

Regulatory pressures and institutional pressures are also powerful forces for businesses in reverse logistics activities (Kapetanopoulou and Tagaras 2011; Kumar and Putnam 2008: 305). So fulfilment of obligation for environmental protection may be another driver (Ginger and Starling 1978; Lau and Wang 2009; Chileshe et al. 2016). Most developed countries have environmental regulations that force organizations to limit the use of resources, reduce waste and the environmental effects of products or packaging and increase recycling and reuse of materials. The EU is seen as the leader in environmental regulations related to vehicles, electrical/ electronic devices, substances and packaging (End-of-life Vehicles Directive (ELV), Waste Electrical and Electronic Equipment Directive (WEEE), Restriction of Use of certain Hazardous Substances Directive (RoHS), and the Packaging and Packaging Waste Directive) (Kumar and Putnam 2008).

Consumers also act as a force for environmental activities (Kumar and Putnam 2008). Product recall activity is also an issue in reverse logistics, so some firms think that reverse logistics is a device for enhancing customer service (Lau and Wang 2009) and creating better customer relationships (Mollenkopf et al. 2007) through better customer satisfaction (Pokharel and Mutha 2009). Reverse logistics may also improve customer loyalty and future sales (Kannan et al. 2012).

Corporate image regarding environmental sustainability is also assumed to be another driver factor in the literature (for example Mollenkopf et al. 2007; Kumar and Putnam 2008; Lau and Wang 2009). Satisfaction of customer desire for green products and strengthening brand image is another driving force (Kapetanopoulou and Tagaras 2011). Reducing the negative environmental impact of production is a factor under environmental drivers (Chileshe et al. 2016). Although some papers quote poor coordination between firms and suppliers, sharing the responsibility for product life cycles may be a motivation factor in applying reverse logistics activities (Bouzon et al. 2015).

In addition to the above, there are also different factors that motivate and facilitate reverse logistics practices such as recapturing value, human resources, having reverse logistics information systems, infrastructure and technology, industry/market factors, obligatory reasons (such as warranty returns, quality control returns or product recalls), functional returns (such as boxes and pallets), shorter product life cycles and clean channels (de Brito and Dekker 2003; Lau and Wang 2009; Ravi and Shankar 2015; Shaik and Abdul-Kader 2014; Bouzon et al. 2015).

As a result of all the reasons mentioned above, effective reverse logistics application may provide competitive advantages for all firms in the supply chain (Jack et al. 2010; Kapetanopoulou and Tagaras 2011).

#### 2.2 Barriers and Problems in Literature

The presence of barriers and problems makes reverse logistics execution very difficult and reduces the success rate (Garg et al. 2016). The benefits of reverse logistics are still not recognized in emerging economies (Abdulrahman et al. 2014). As a starting point, if firms specify their internal or external barriers and problems it should be possible to find a solution. Some driving factors act as a barrier in their absence. For example, as mentioned before, environmental laws are a motivating factor for firms but the nonexistence of legislation may be a barrier. These examples may be broadened by other factors such as lack of public awareness, human resources/financial resources and managerial issues, company policies, market uncertainties etc.

One of the most important barriers to reverse logistics is lack of awareness of people (Sharma et al. 2011). Absence of publicity and knowledge about reverse logistics is seen as another problem (Lau and Wang 2009). So, it can be said that consumer perception of recovered products may be another challenge for businesses (Rahimifard et al. 2009). Reverse logistics activity needs awareness and wide acceptance from society. It may appear as limited market demand for reprocessed products (Geyer and Jackson 2004).

Like almost every corporate initiative, reverse logistics programs also require top management support. Management inattention (Rogers and Tibben-Lembke 1998; Sharma et al. 2011) and lack of commitment of top management (Ravi and Shankar 2005; Abdulrahman et al. 2014) may determine company policies and can be basic barriers to stating the vision, indicating the steps and motivating the workers. Another problem is the perception of the subject. So the importance of reverse logistics relative to other issues (Rogers and Tibben-Lembke 1998; Abdulrahman et al. 2014) appears as a challenging issue.

Limited information flow between organizations or lack of sufficient information may be assumed as another barrier (Ravi and Shankar 2005). The type of materials used and the processes that are applied during production is useful information when deciding the options for returned products. Usually, there is not a seamless

information flow between firms but with the collaboration of partners and the effective use of some technologies and information systems this problem can be solved.

Restrictive company policies may be another problem regarding reverse logistics (Rogers and Tibben-Lembke 1998; Bouzon et al. 2018). After the introduction of some environmental laws and the concept of extended producer responsibility, most companies have shifted from producing only brand-new products to a product recovery strategy (Ravi and Shankar 2005).

Often, there are some problems regarding the quality of product (Ravi and Shankar 2005; Sharma et al. 2011). When compared with the new product, the core quality is not uniform and it is not possible to assess its quality before it is returned. After salvaging, it is necessary to inspect the product to determine the quality level, recovery options and the destination.

High cost and lack of supportive incentives of operation may be another barrier (Lau and Wang 2009). Firms believe that the cost of implementing reverse logistics systems will be higher than the obtained financial benefit (Jindal and Sangwan 2011). Theoretically, it is believed that reverse logistics is profitable. However, this is not guaranteed in practice because it is related to a lot of factors such as consumer perception, virgin material price, effectiveness of the recovery process and core status. So, low potential profit is another barrier. In addition to low benefits, some studies mention uncertainties about financial benefits as a barrier, so unclear economic benefits (may be another factor Bouzon et al. 2018).

Resistance to change occurs especially in small businesses and is caused by the lack of management attention or lack of awareness of the environmental and financial benefits of product recovery (Ravi and Shankar 2005, 2015; Gonzalez-Torre et al. 2010). In the beginning, reverse logistics systems may involve high levels of investment before businesses realize the benefits. So, reluctance to devote resources to reverse logistics programs may be another problem (Lau and Wang 2009). Reverse logistics can be a competitive weapon so strategic planning and determining the goals and actions required are necessary. Lack of strategic planning may be the chief barrier to reverse logistics (Ravi and Shankar 2005; Abdulrahman et al. 2014).

Uncertainties such as timing, quality and quality of returned products generate another barrier (Fleischmann et al. 1997a, b; Shaik and Abdul-Kader 2014). Because of uncertainty, it is not easy to plan collection and recovery operations and it is hard to balance needs and returns (Guide et al. 2003; Roy et al. 2006). So, planning complexity may be another barrier. Reverse logistics networks should be organized in order to handle the uncertain timing and quantity of the return and stochastic content in terms of quality and value (Geyer and Jackson 2004). This subject is also related to communication and information technology usage because efficient information sharing (e.g. information about returned product status) may be a solution to this challenge (Hall et al. 2013).

Lack of standardized systems and technologies about recovering or salvaging the product may be another barrier (Rogers and Tibben-Lembke 1998; Bouzon et al. 2018). A company can only handle reverse logistics activities if it has adequate

systems and infrastructure (Jack et al. 2010). As an important subtitle, lack of information technology for reverse logistics operations to monitor the product from collection, during recovery and to redistribution may be another problem (Ravi and Shankar 2005; Kokkinaki et al. 2000; Lau and Wang 2009; Hall et al. 2013).

Limited feasibility of recovery operations (Geyer and Jackson 2004) or lack of the latest technology for recovery (Bouzon et al. 2018) may be another problem for reverse logistics. Lack of performance metrics (Ravi and Shankar 2005; Hall et al. 2013; Abdulrahman et al. 2014) causes lack of observing the capability of the processes, the success of the process or its failure and is a barrier to reverse logistics programs.

Financial resources (Rogers and Tibben-Lembke 1998; Sharma et al. 2011; Abdulrahman et al. 2014) may become a prime challenge in reverse logistics systems. To establish the reverse logistics system, to build the infrastructure and to provide the trained manpower and the technology for data acquiring and tracking, sufficient financial resources is a requirement (Ravi and Shankar 2005). Because of uncertainties about time, quality and quantity and due to risks and difficulties, firms have to face highly uncertain investment (Kapetanopoulou and Tagaras 2011).

Product recovery activities require considerable amounts of specialized know-how and staff (Kapetanopoulou and Tagaras 2011). So, an important barrier is personnel resources (Rogers and Tibben-Lembke 1998; Abdulrahman et al. 2014). Lack of training and education (Ravi and Shankar 2005; Sharma et al. 2011) or lack of technical skill (Bouzon et al. 2018) in reverse logistics processes become problems when realizing the benefits and understanding the importance of this process on the environment and the financial situation.

Reverse logistics systems require high levels of collaboration and cooperation (Ye et al. 2013) so lack of support from supply chain partners is assumed to be another barrier to reverse logistics (Gonzalez-Torre et al. 2010; Sharma et al. 2011; Ravi and Shankar 2015; Bouzon et al. 2018). Reverse logistics needs the cooperative behavior of supply chain partners such as distributors, warehouses and retailers. Reluctance towards reverse logistics and information sharing may be barriers to reverse logistics.

Other factors such as Legal issues or lack of laws and legislation, Lack of systems to monitor the returns, Large amount of returned inventory held, Unidentified or unauthorized returns, Competitive issues, Unknown total cost of the returns process, Consumer attitudes towards using recovered material/product, Carrying costs of inventory, Transportation costs for the used product in the reverse direction and Difficulties in forecasting and planning for reverse logistics (Rogers and Tibben-Lembke 1998; Lau and Wang 2009; Jack et al. 2010; Abdulrahman et al. 2014) are seen as barriers to applying reverse logistics effectively.

# 3 Method and Application

The process of identifying the barriers and drivers involves determining the relative importance or ranks of the criteria by experts. In this paper, to determine the weights of criteria one of the Multiple Criteria Decision Methods, AHP (Analytic Hierarchy Process), is used.

Multiple Criteria Decision Methods (MCDM) deal with the evaluation of a set of alternatives, often involving multiple conflicting criteria. MCDM provide a ranking, a choice or sort the alternatives (Aruldoss et al. 2013; Mulliner et al. 2016). Originally AHP was developed by Saaty (Bernasconi et al. 2010). Since its invention it has become one of the most widely used MCDM tools by researchers and decision-makers (Vaidya and Kumar 2006). According to Saaty (2008), AHP is a theory of measurement through pair-wise comparisons and relies on the judgment of experts to derive priority scales. The AHP is based on pair-wise comparisons to estimate criteria weight and compare the alternatives (Mulliner et al. 2016) used for choosing and prioritization (Lai et al. 2002; Velasquez and Hester 2013).

The strength of the approach is that it can consider qualitative and quantitative, tangible and intangible factors in decision making. It is relatively simple to apply (Al-Harbi 2001), is flexible and intuitive and checks inconsistency (Aruldoss et al. 2013). Because this paper intends to investigate the most powerful drivers and dominant barriers from the literature, the factors are investigated. The barriers and motivators are discussed with three experts from academia and the private sector and the final list is prepared. After meeting with experts the numbers of criteria for these two subjects are reduced to 10 and 13, respectively (Table 1). Pair-wise comparison questions are prepared. This requires 45 comparisons for drivers and 78 comparisons for barriers (with formula n(n-1)/2, where n is the number of the criteria). In pairwise comparison questions, Saaty's importance scale is used: Equally important (1), Weak importance (3), Strong importance (5), Demonstrated importance (7), Absolute importance (9), and intermediate values of 2,4,6,8.

The research is conducted on a sample company. This company is the one of the leading pipe manufacturing companies in Turkey. They have a sustainability program and try to increase their effectiveness. The decision-maker group consists of six experts with knowledge of the pipe-manufacturing process, raw materials, the facility's environmental effect, consumer preferences and legal issues. The education and responsibilities in the company of the six decision makers who participated in the ranking process are,

- DM1: Engineer, Manager, Quality and R&D
- DM2: Engineer, Chief technician, Compound manufacturing
- DM3: Engineer, Coordinator, Safety and environment
- DM4: Engineer, Manager, Logistics
- DM5: Engineer, Responsible officer, Environment
- DM6: Engineer, Chief technician, Repair and maintenance

Drivers	Barriers
C1 Direct economic benefit	C1 Lack of awareness of consumers or limited market demand
C2 Regulatory pressures	C2 Unclear economic benefits
C3 Consumers' demand	C3 Company policies that make harder the reverse logistics
C4 Social responsibility or corporate citizenship	C4 Lack of standardized systems, infra- structure and technologies
C5 Suppliers' demand	C5 Uncertainties about time, quality and quantity of returned products
C6 Obligatory reasons (warranty returns, quality control returns or product recalls etc.)	C6 Lack of financial resources
C7 Corporate image	C7 Lack of laws and legislations
C8 Functional returns (such as boxes and pallets)	C8 Management inattention and lack of commitment of top management
C9 Competitive advantage	C9 Low quality level of product
C10 Environmental concern and reducing the negative environmental impact	C10 Personnel resources and lack of training and education
	C11 Limited feasibility of recovery operations
	C12 High cost and low profit potential
	C13 Planning complexity

Table 1 Motivation factors and barriers considered in analysis

The AHP method is firstly applied individually and the weights are calculated for motivation factors (Table 2) and for barriers (Table 3). Later, the aggregation matrix of six decision makers was computed for general weights of motivation factors (Table 4) and for barriers (Table 5).

As seen from Table 2, as motivation factors, all of the decision makers give the highest priority to customer demand, obligatory reasons, the firm's image and competition factors. Unlike motivation factors, barrier weight orders show dispersed settlement (Table 3). Legal issues, low product quality, human resources, high cost and lack of financial resources have higher priorities. Table 4 and Table 5 give the final weights of all decision makers.

Obligatory reasons (such as warranty, contract clauses, quality returns), customer demand and enhancing corporate image have the highest priority when compared to the others (Table 4). This firm has environmental initiatives and applications so perhaps because of this, decision makers believe that an environmentally conscious corporate culture is important. They also stated that functional returns may motivate the reverse logistics initiatives. From the table of final ranking of barriers (Table 5) it can be seen that the lack of legislation that directs firms, low product quality and uncertainties about time, quantity and quality are the most important barriers to reverse logistics activities.

Table 2 Decision makers' individual drivers and weights

			)									
	DM 1		DM 2		DM 3		DM 4		DM 5		DM 6	
C1 (economic)	0.0790	(7)	0.0483	(7)	0.0457	(6)	0.0599	(c)	0.0436	(8)	0.1349	(3)
C2 (legal)	0.0287	(8)	0.0337	(8)	0.0912	(9)		(5)	0.0322	(6)	0.0591	(9)
C3 (customer)	0.1179	(4)	0.1934	(2)	0.1167	(3)	0.1058	(4)	0.2604	(1)	0.2687	$\Xi$
C4 (social res)	0.0829	(9)	0.0781	(9)		(7)		(8)	0.0437	(7)	0.0415	(8)
C5 (supplier)	0.0155	(10)		(10)		(10)	0.0190	(6)		(10)	0.0173	(10)
C6 (obligatory)	0.2891	(1)	0.2580	(1)	0.0929	(5)		(1)	0.1687	(3)	0.1778	(2)
C7 (image)	0.1490	(2)		(3)		(2)		(2)		(2)	0.1119	4)
C8 (functional)	0.0178	(6)		(6)		(8)		(10)	0.1003	(4)	0.0433	6
C9 (competition)		(3)		(4)		(4)		(3)	0.0854	(5)	0.1101	(5)
C10 (env cons.)	0.0831	(5)	0.0826	(5)	0.1976	(1)		(9)	0.0578	(9)	0.0354	6

Table 3 Decision makers' individual barriers and weights

	DM1		DM2		DM3		DM4		DM5		DM6	
C1 (customer aware.)	0.0618	(8)	0.0250	(13)	0.0521	(10)	0.0206	(13)	0.0795	(9)	0.1322	(5)
C2 (economic benefit)	0.0754	(9)	0.0359	(6)	0.0319	(13)	0.0530	(7)	0.0740	(7)	0.0682	(9)
C3 (buss. policies)	0.0414	(6)	0.0339	(10)	0.0563	(9)	0.0270	(12)	0.0360	(11)	0.0450	(10)
C4 (system&infra.)	0.0620	(7)	0.0582	(8)	0.0754	(5)	0.0517	(8)	0.0523	(8)	0.0474	(6)
C5 (uncertainties)	0.1383	(3)	0.0618	(7)	0.0319	(12)	0.0477	(6)	0.0969	(5)	0.0784	(5)
C6 (financial res.)	0.0226	(12)	0.0266	(12)	0.0862	(4)	0.2027	(1)	0.1293	(2)	0.0293	(13)
C7 (legal issues)	0.1381	(4)	0.0274	(11)	0.1936	(1)	0.1481	(2)	0.0441	(6)	0.2054	(1)
C8 (top management)	0.0181	(13)	0.1006	(5)	0.1661	(2)	0.0692	(9)	0.0379	(10)	0.0350	(12)
C9 (product quality)	0.1392	(2)	0.1073	(4)	0.0389	(11)	0.0858	(5)	0.1232	(3)	0.0659	(6)
C10 (human res.)	0.0258	(11)	0.1834	(1)	0.0547	(7)	0.1400	(3)	0.1715	(1)	0.1236	(3)
C11 (recovery option)	0.0376	(10)	0.1182	(3)	0.0537	(6)	0.0884	(4)	0.1077	(4)	0.0408	(11)
C12 (high cost)	0.1393	(1)	0.1540	(2)	0.0542	(8)	0.0343	(10)	0.0296	(12)	0.0498	(8)
C13 (plan. complexity)	0.1005	(5)	0.0677	(9)	0.1049	(3)	0.0314	(11)	0.0179	(13)	0.0789	(4)

**Table 4** Final ranking of motivation factors and the weights

	Criteria weight	
C1 (economic)	0.0628	(6)
C2 (legal)	0.0545	(9)
C3 (customer)	0.1944	(2)
C4 (social res)	0.0586	(7)
C5 (supplier)	0.0161	(10)
C6 (obligatory)	0.1961	(1)
C7 (image)	0.1565	(3)
C8 (functional)	0.0569	(5)
C9 (competition)	0.0969	(8)
C10 (env conscious)	0.1073	(4)

**Table 5** Final ranking of barriers and the weights

	Criteria weigh	nt
C1 (customer awareness)	0.0599	(11)
C2 (economic benefit)	0.0509	(12)
C3 (buss. policies)	0.0397	(13)
C4 (system&infrastructure)	0.0686	(9)
C5 (uncertainties)	0.0791	(5)
C6 (financial resources)	0.0775	(6)
C7 (legal issues)	0.1189	(1)
C8 (top management)	0.0773	(7)
C9 (product quality)	0.1026	(3)
C10 (human resources)	0.1073	(2)
C11 (recovery options)	0.0819	(4)
C12 (high cost)	0.0607	(10)
C13 (planning complexity)	0.0757	(8)

#### 4 Conclusion

Reverse logistics issues are mainly driven by regulations in Europe, by profit in North America and are in the emerging stage in other parts of the world. Lack of regulations and lack of systems and infrastructure are inhibiting environmental initiatives in developing countries. Therefore, reverse logistics has not received the desired attention (Srivastava and Srivastava 2006).

Reverse logistics has many drivers but also a lot of barriers in practice especially in developing countries. And it is not easy to say which driver is more powerful and which barrier has the greatest effect. Unearthing the relative importance of the drivers and barriers and ranking them makes the starting point of practicing reverse logistics application more logical and helps the decision makers decide where they should start to solve the problems. Thus the results may be used as road map by other practitioners to develop solutions to problems and to focus more on drivers.

In this study, obligatory reasons, customer demand and enhancing corporate image were found to be the most powerful drivers that enable reverse logistics

practices. So, if companies check their status for these factors they can be used as stepping-stones to build their reverse logistics system. Legal issues, lack of trained human resources and low product quality were identified as the most important problems/barriers in practice and so provide a road map and solutions that can be implemented on a priority basis.

The limitation of this study is that because of the characteristic features of reverse logistics, it is focused on only one sector so the priorities cannot be generalized to other industries. However, the same structure can be applied to other industries that are suitable for reverse logistics and product recovery.

#### References

- Abdulrahman, M. D., Gunasekaran, A., & Subramanian, N. (2014). Critical barriers in implementing reverse logistics in the Chinese manufacturing sectors. *International Journal of Production Economics*, 147, 460–471.
- Agrawal, S., Singh, R. K., & Murtaza, Q. (2015). A literature review and perspectives in reverse logistics. *Resources, Conservation and Recycling*, 97, 76–92.
- Akdogan, M. S., & Coskun, A. (2012). Drivers of reverse logistics activities: An empirical investigation. *Procedia Social and Behavioral Sciences*, 58, 1640–1649.
- Al-Harbi, K. M. A. (2001). Application of the AHP in project management. *International Journal of Project Management*, 19, 19–27.
- Andic, E., Yurt, O., & Baltacioglu, T. (2012). Green supply chains: Efforts and potential applications for the Turkish market. *Resources, Conservation and Recycling*, *58*, 50–68.
- Aruldoss, M., Lakshmi, T. M., & Venkatesan, V. P. (2013). A survey on multi criteria decision making methods and its applications. *American Journal of Information Systems*, 1(1), 31–43.
- Bernasconi, M., Choirat, C., & Seri, R. (2010). The analytic hierarchy process and the theory of measurement. *Management Science*, 56(4), 699–711.
- Bouzon, M., Govindan, K., & Rodriguez, C. M. T. (2018). Evaluating barriers for reverse logistics implementation under a multiple stakeholders' perspective analysis using grey decision making approach. *Resources, Conservation and Recycling, 128*, 315–335.
- Bouzon, M., Spricigo, R., Rodriguez, C. M. T., de Queiroz, A. A., & Miguel, P. A. C. (2015). Reverse logistics drivers: Empirical evidence from a case study in an emerging economy. *Production Planning & Control*, 26(16), 1368–1385.
- Carter, C. R., & Ellram, L. M. (1998). Reverse logistics: A review of the literature and framework for future investigation. *Journal of Business Logistics*, 19(1), 85–102.
- Chileshe, N., Rameezdeen, R., & Hosseini, M. R. (2016). Drivers for adopting reverse logistics in the construction industry: A qualitative study. *Engineering, Construction and Architectural Management*, 23(2), 134–157.
- de Brito, M. P., & Dekker, R. (2003). A framework for reverse logistics [pdf]. Erasmus Research Institute of Management Report Series: Research in Management. Accessed February 18, 2013, from https://repub.eur.nl/pub/354/ERS-2003-045-LIS.pd
- Erol, I., Velioglu, M. N., Serifoglu, F. S., Buyukozkan, G., Aras, N., Cakar, N. D., & Korugan, A. (2010). Exploring reverse supply chain management practices in Turkey. Supply Chain Management: An International Journal, 15(1), 43–54.
- Fleischmann, M., Bloemhof-Ruwaard, J. M., Dekker, R., van der Laan, E., van Nunen, J. A. E. E., & Van Wassenhove, L. N. (1997a). Quantitative models for reverse logistics: A review. European Journal of Operational Research, 103, 1–17.

Fleischmann, M., van Wassenhove, L. N., van Nunen, J. A. E. E., van der Laan, E., Dekker, R., & Bloemhof-Ruwaard, J. M. (1997b). Quantitative models for reverse logistics: A review. European Journal of Operational Research, 103(1), 1–17.

- Garg, D., Luthra, S., & Haleem, A. (2016). An evaluation of barriers to implement reverse logistics: A case study of Indian fastener industry. *International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering*, 10(8), 1462–1467.
- Geyer, R., & Jackson, T. (2004). Supply loops and their constraints: The industrial ecology of recycling and reuse. *California Management Review*, 46(2), 55–73.
- Gilanli, E., Altug, N., & Oguzhan, A. (2012). Reverse logistics activities in Turkey. *Ege Academic Review, 12*(3), 391–399.
- Ginger, P. M., & Starling, J. M. (1978). Reverse distribution channels for recycling. *California Management Review*, 20(3), 72–82.
- Gonzalez-Torre, P., Alvarez, M., Sarkis, J., & Adenso-Diaz, B. (2010). Barriers to the implementation of environmentally oriented reverse logistics: Evidence from the automotive industry sector. *British Journal of Management*, 21, 889–904.
- Guide, V. D. R., Jr., Teunter, R. H., & Van Wassenhove, L. N. (2003). Matching demand and supply to maximize profits from remanufacturing. *Manufacturing & Service Operations Man*agement, 5(4), 303–316.
- Hall, D. J., Huscroft, J. R., Hazen, B. T., & Hanna, J. B. (2013). Reverse logistics goals, metrics, and challenges: Perspectives from industry. *International Journal of Physical Distribution & Logistics Management*, 43(9), 768–785.
- Ho, G. T. S., Choy, K. L., Lam, C. H. Y., & Wong, D. W. C. (2012). Factors influencing implementation of reverse logistics: A survey among Hong Kong businesses. *Measuring Business Excellence*, 16(3), 29–46.
- Hsu, C. C., Tan, K. C., Zailani, S. H. M., & Jayaraman, V. (2013). Supply chain drivers that foster the development of green initiatives in an emerging economy. *International Journal of Oper*ations & Production Management, 33(6), 656–688.
- Jack, E. P., Powers, T. L., & Skinner, L. (2010). Reverse logistics capabilities: Antecedents and cost savings. *International Journal of Physical Distribution & Logistics Management*, 40(3), 228–246.
- Jindal, A., & Sangwan, K. S. (2011). Development of an interpretive structural model of barriers to reverse logistics implementation in Indian industry. In J. Hesselbach & C. Herrmann (Eds.), Glocalized solutions for sustainability in manufacturing: Proceedings of the 18th CIRP International Conference on Life Cycle Engineering, Germany, May 2–4.
- Kannan, D., Diabat, A., Alrefaei, M., Govindan, K., & Yong, G. (2012). A carbon footprint based reverse logistics network design model. Resources, Conservation and Recycling, 67, 75–79.
- Kannan, G., Sasikumar, P., & Devika, K. (2010). A genetic algorithm approach for solving a closed loop supply chain model: A case of battery recycling. *Applied Mathematical Modelling*, 34, 655–670.
- Kapetanopoulou, P., & Tagaras, G. (2011). Drivers and obstacles of product recovery activities in the Greek industry. *International Journal of Operations & Production Management*, 31(2), 148–166.
- Kokkinaki, A. I., Dekker, R., van Nunen, J., & Pappis, C. (2000). An exploratory study on electronic commerce for reverse logistics. Supply Chain Forum an International Journal, 1, 10–17
- Kumar, S., & Putnam, V. (2008). Cradle to cradle: Reverse logistics strategies and opportunities across three industry sectors. *International Journal of Production Economics*, 115, 305–315.
- Lai, V. S., Wong, B. K., & Cheung, W. (2002). Group decision making in a multiple criteria environment: A case using the AHP in software selection. *European Journal of Operational Research*, 137, 134–144.
- Lau, K. H., & Wang, Y. (2009). Reverse logistics in the electronic industry of China: A case study. Supply Chain Management: An International Journal, 14(69), 447–465.

- Mangla, S. K., Govindan, K., & Luthra, S. (2016). Critical success factors for reverse logistics in Indian industries: A structural model. *Journal of Cleaner Production*, 129, 608–621.
- Mollenkopf, D., Russo, I., & Frankel, R. (2007). The returns management process in supply chain strategy. *International Journal of Physical Distribution & Logistics Management*, 37(7), 568–592.
- Mulliner, E., Malys, N., & Maliene, V. (2016). Comparative analysis of MCDM methods for the assessment of sustainable housing affordability. *Omega*, 59, 146–156.
- Mutha, A., & Pokharel, S. (2009). Strategic network design for reverse logistics and remanufacturing using new and old product modules. *Computers and Industrial Engineering*, 56(1), 334–346.
- Olorunniwo, F. O., & Li, X. (2010). Information sharing and collaboration practices in reverse logistics. *Supply Chain Management: An International Journal*, 15(6), 454–462.
- Pokharel, S., & Mutha, A. (2009). Perspectives in reverse logistics: A review. *Resources, Conservation and Recycling*, 53, 175–182.
- Prakash, C., & Barua, M. K. (2015). Integration of AHP-TOPSIS method for prioritizing the solutions of reverse logistics adoption to overcome its barriers under fuzzy environment. *Journal of Manufacturing Systems*, 37, 599–615.
- Presley, A., Meade, L., & Sarkis, J. (2007). A strategic sustainability justification methodology for organisational decisions: A reverse logistics illustration. *International Journal of Production Research*, 45(18–19), 4595–4620.
- Rahimifard, S., Coates, G., Staikos, T., Edwards, C., & Abu-Bakar, M. (2009). Barriers, drivers and challenges for sustainable product recovery and recycling. *International Journal of Sustainable Engineering*, 2(2), 80–90.
- Ravi, V., & Shankar, R. (2005). Analysis of interactions among the barriers of reverse logistics. *Technological Forecasting & Social Change*, 72, 1011–1029.
- Ravi, V., & Shankar, R. (2015). Survey of reverse logistics practices in manufacturing industries: An Indian context. *Benchmarking: An International Journal*, 22(5), 874–899.
- Ravi, V., Shankar, R., & Tiwari, M. K. (2005). Analyzing alternatives in reverse logistics for end-of-life computers: ANP and balanced scorecard approach. *Computers & Industrial Engineering*, 48, 327–356.
- Rogers, D. S., & Tibben-Lembke, R. S. (1998). Going backwards Reverse logistics trends practices [pdf]. Reverse Logistics Executive Council. Accessed March 21, 2016, from http:// www.abrelpe.org.br/imagens\_intranet/files/logistica\_reversa.pdf
- Roy, J., Nollet, J., & Beaulieu, M. (2006). Reverse logistics networks and governance structures. Supply Chain Forum an International Journal, 7(2), 58–67.
- Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International Journal of Services Sciences*, 1(1), 83–98.
- Sarkis, J., Gonzalez-Torre, P., & Adenso-Diaz, B. (2010). Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of Operations Management*, 28, 163–176.
- Shaik, M. N., & Abdul-Kader, W. (2014). Comprehensive performance measurement and causaleffect decision making model for reverse logistics enterprise. Computers & Industrial Engineering, 68, 87–103.
- Sharma, S. K., Panda, B. N., Mahapatra, S. S., & Sahu, S. (2011). Analysis of barriers for reverse logistics: An Indian perspective. *International Journal of Modeling and Optimization*, 1(2), 101–106.
- Srivastava, S. K. (2008). Network design for reverse logistics. *Omega*, 36, 535–548.
- Srivastava, S. K., & Srivastava, R. V. (2006). Managing product returns for reverse logistics. *International Journal of Physical Distribution & Logistics Management, 36*(7), 524–546.
- Stock, J. R. (2001, October). Reverse logistics in the supply chain. *Global Purchasing & Supply Chain Strategies*, 44–48.
- Thiyagarajan, G., & Ali, S. (2016). Analysis of reverse logistics implementation barriers in online retail industry. *Indian Journal of Science and Technology*, *9*(19), 1–6.

Vahabzadeha, A. H., Asiaeib, A., & Zailanic, S. (2015). Reprint of Green decision-making model in reverse logistics using FUZZY-VIKOR method. Resources, Conservation and Recycling, 104, 334–347.

- Vaidya, O. S., & Kumar, S. (2006). Analytic hierarchy process: An overview of applications. European Journal of Operational Research, 169, 1–29.
- Velasquez, M., & Hester, P. T. (2013). An analysis of multi-criteria decision making methods. *International Journal of Operations Research*, 10(2), 56–66.
- Ye, F., Zhao, X., Prahinski, C., & Li, Y. (2013). The impact of institutional pressures, top managers' posture and reverse logistics on performance – Evidence from China. *International Journal of Production Economics*, 143, 132–143.

# Companies' Understanding of Transborder Cooperation: An Empirical Study in Poland and Republic of Belarus



Anna Wasiluk

Abstract Increasing globalization of economic processes forces companies to strengthen intensively their competitiveness. They need to find new sources of competitive advantages and one of such sources could be the internalization of company operations. The use of geographical location may be an additional source of increasing the attractiveness and competitiveness of border regions and enterprises. Although there is no shortage of studies devoted to trans-border cooperation and in fact its political and legal context, there is a deficit of publications devoted to actual readiness for undertaking trans-border cooperation by Polish and Belarusian companies. This may be due to the specifics of conducting research in Belarusian enterprises and the difficulty of reaching companies there. The objective of this text is to identify the level of current cooperation between Polish and Belarusian businesses and their readiness to tighten this cooperation in the near future. The study found a large deficit at both continuation the existing cooperation and prospects for the possibility of strengthening it in the near future. The analyses showed that the dominant percentage of surveyed companies has not undertaken any cooperation with foreign companies (Polish or Belarusian) so far and does not intend to undertake it in the near future.

**Keywords** Cooperation of companies · Trans-border · Poland · Republic of Belarus

#### 1 Introduction

Increasing globalization of economic processes forces companies to strengthen intensively their competitiveness. They need to find new sources of competitive advantages and one of such sources could be the internalization of company

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operations. The use of geographical location may be an additional source of increasing the attractiveness and competitiveness of border regions and enterprises.

The EU policy towards Belarus has recently changed. Although on 27 February 2017 the European Council decided to extend the sanctions by 1 year, i.e. until 28 February 2018, they only cover the embargo on arms and freezing of assets and travel restrictions against four persons. These actions resulted in a decrease of the political risks associated with investing in Belarus and conducting business activity with Belarusian companies. Poland opened to wide economic cooperation with Belarus. A similar policy is also evident in the activities of other countries.

Although there is no shortage of studies devoted to trans-border cooperation and in fact its political and legal context, there is a deficit of publications devoted to actual readiness for undertaking trans-border cooperation by Polish and Belarusian companies. This may be due to the specifics of conducting research in Belarusian enterprises and the difficulty of reaching companies there. This text fills this gap.

#### 2 Review of the Literature

As a result of globalization and integration, the role of borders as barriers is becoming less significant. In a situation with advantageous conditions, the negative effects of borders are felt only slightly, however they do not disappear fully (Van Houtum and Strűver 2002; Ackleson 2005; Coleman 2005; Knippschild 2011; Lechevalier and Wielgohs 2013; Guo 2015). Even in strongly integrated areas, such as the European Union, they always present a certain barrier (Balibar 2009; O'Dowd 2010). A country's border on the one hand presents an obstacle, but on the other, an opportunity. Therefore both its negative and its positive effects can be felt, and a localization close to the border can be a development factor (Reitel 2006; Sohn et al. 2009; Balogh and Pete 2018; Sohn and Reitel 2016; Dörry and Walther 2015).

For many years, areas close to borders have been regarded as problematic regions, economically behind and doomed to marginalization as a result of their peripheral nature. Currently the scale of political, economic and social reforms indicates that they should be regarded as core areas, playing an important role not only regionally, but also in the wider context of an integrated Europe. Carrying out research on their socio-economic development seems, therefore, both significant and wholly justified (Miłkowski 2013).

Trans-border cooperation is seen as a significant factor of international cooperation between neighboring countries (e.g., Dołzbłasz and Raczyk 2010). It allows the cooperating regions to obtain a synergic effect and to eliminate unfavourable characteristics linked with their peripheral location in their own country (Cappelin and Batey 1993; Kosiedowski 2009). It should however be underlined that the type of border and the changes in its type over time have a very large significance for trans-border relations between neighbouring countries (Moraczewska 2008).

The foundation of trans-border cooperation in Poland consists of bilateral agreements with its neighboring countries. The documents regulating cooperation with Belarus include:

- 1. The Declaration of good neighborliness, mutual understanding and cooperation between the Republic of Poland and the Republic of Belarus signed on October 10, 1991;
- 2. The Agreement between the Government of the Republic of Poland and the Government of the Republic of Belarus on the main principles of trans-border cooperation signed on April 24, 1993;
- 3. The Treaty between the Republic of Poland and the Republic of Belarus on good neighborliness and friendly cooperation singed June 23, 1992.

A serious obstacle in trans-border cooperation between Poland and Belarus is on the one hand the differing levels of economic development (Ministerstwo Gospodarki 2015; Czerewacz-Filipowicz 2016; Główny Urząd Statystyczny 2016), and on the other, differing traditions and experiences in cooperation (Kosiedowski 2013). Cooperation is also made difficult by the different approaches of the countries' leaders towards trans-border cooperation. While Poland adopts a largely decentralized approach, Belarus' approach is inspired and tightly controlled by central powers. The development of a mutual relationship is not helped by problems such as difficulties in crossing the border, as well as instabilities in the financial system (Kosiedowski 2009).

It should be underlined that the conditions of trans-border cooperation show much variability over time, and therefore demand constant detailed monitoring. An awareness of the complicated mechanisms of trans-border cooperation and the possibilities of taking advantage of the opportunities it offers should be considered in development plans and programs for the eastern border, which since 2004 is the eastern border of the European Union as a whole.

This is visible among others in the strategic documents of the Podlaskie Voivodeship (Urząd Marszałkowski Województwa Podlaskiego 2013), in which one of three strategic aims is the development of national and international socioeconomic links of the region, which will be realized among others through the development of partnership-based trans-border cooperation. Eastern markets, which in the past provided a strong incentive for economic development, should in the future too be dealt with as a priority, also in the context of stimulating cooperation with national partners and those from the EU. The development of partnerships with Eastern neighbors should be based mainly on potential and existing experiences as well as on creating formal and informal links within the network of cooperation.

It should be highlighted that networks currently play a particular role. It is accepted that the current economy is a network, and links of this kind appear in all areas of economic life. In socio-economic systems the development of structures and network links becomes clearly visible. A strong and highly developed network of internal and external links is, beside technical and social infrastructure and effective strategic management, one of the factors conditioning their international competitiveness. One answer to present-day challenges is most certainly clusters, very often defined through the criteria of network links (Wasiluk 2017). These structures are currently seen as carriers of innovation and an improvement in the competitive

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position of not only businesses, but entire regions (Tomaszuk 2017). In border areas, not only national structures, but also trans-border structures are desirable. Keeping in mind the fact that the Podlaskie Voivodship border Lithuania and Belarus, the formation of such structures seems to be particularly significant (Wasiluk and Daniluk 2013).

One of the necessary conditions for the formation and development of network structures, including clusters, is the readiness to undertake real cooperation by all actors, including companies. Without a readiness of entities to undertake cooperation and an openness to it, actions aimed at developing these structures are doomed to fail. An analysis of trans-border cooperation solely based on statistical data, thanks to which we can define, among others, the number of completed projects, the sum of resources invested or the number of communication infrastructure or technical appliances put to use, is incomplete. Constant supplementation in the form of research dedicated to relations between various entities of economic life is needed, and actions must be taken to maintain this at a high level, on the basis of partnership relations.

# 3 Methodology

In this article, the issue of openness to trans-border cooperation by Polish and Belarusian businesses was undertaken. The objective of this text is to identify the level of current cooperation between Polish and Belarusian businesses and their readiness to tighten this cooperation in the near future.

The analysis was carried out on 381 Polish businesses in the construction and industrial sector (headquartered in the Podlaskie Voivodeship) and 121 Belarussian businesses. Within the industrial entities, a particularly large proportion comprised firms in the food, wood and furniture sectors as well as the metal and machine sectors (see Table 1). These sectors are priority sectors both in the Podlaskie Voivodeship and in Belarus. The entities chosen for participation in this study were sourced from various databases. Some respondents were obtained thanks to the "snowball" method, consisting of recommendations of given entities by other participants of the study.

Bearing in mind the stated objective, the research problem was formulated in the form of the following questions:

- 1. What is the declared level of cooperation between the studied companies and foreign ones (Belarusian and Polish respectively)?
- 2. What is the researched companies' interest in strengthening cooperation with foreign companies (Belarusian and Polish respectively) in the near future?
- 3. Do political "turbulence" affect the cooperation with foreign companies?

The questionnaire was addressed to the owners or members of the top management of the companies qualified for the study. Respondents were assessing the

**Table 1** Characteristics of the studied companies

		Industry			
Total N (%)		Construction N (%)	Food N (%)	Metal and machine N (%)	Wood and furniture N (%)
Poland					
Size of the studied con	npanies (numbe	er of employees)			
Up to 9 people	85 (22.31)	20 (26.32)	8 (9.64)	10 (13.16)	25 (30.49)
10-49 people	146 (38.32)	23 (30.26)	40 (48.19)	26 (34.21)	42 (51.22)
50-249 people	110 (28.87)	27 (35.53)	26 (31.33)	23 (30.26)	10 (12.19)
250 people and more	40 (10.50)	6 (7.89)	9 (10.84)	17 (22.37)	5 (6.10)
Age of the studied enti	ties (number of	years on the ma	ırket)		
Up to 1 year	3 (0.79)	1 (1.31)	0 (0.00)	0 (0.00)	0 (0.00)
1–3 years	28 (7.34)	12 (15.79)	0 (0.00)	2 (2.63)	8 (9.76)
4–10 years	67 (17.58)	15 (19.74)	13 (15.66)	13 (17.11)	13 (15.85)
More than 10 years	283 (74.38)	48 (63.16)	70 (84.34)	61 (80.26)	61 (74.39)
Belarus					
Size of the studied con	npanies (numbe	er of employees)			
Up to 15 people	17 (14.05)	6 (8.96)	1 (10.00)	1 (7.69)	7 (24.14)
16-100 people	36 (29.75)	24 (35.82)	6 (60.00)	3 (23.08)	3 (10.34)
101-250 people	18 (14.88)	12 (17.91)	3 (30.00)	0 (0.00)	6 (20.69)
More than 250 people	50 (41.32)	25 (37.31)	0 (0.00)	9 (69.23)	13 (44.83)
Age of the studied enti	ties (number of	years on the ma	rket)		
Up to 1 year	1 (0.83)	1 (1.49)	2 (20.00)	1 (7.69)	4 (13.79)
1–3 years	6 (4.96)	0 (0.00)	6 (60.00)	2 (15.38)	6 (20.69)
4–10 years	35 (28.93)	20 (29.85)	0 (0.00)	10 (76.92)	19 (65.52)
More than 10 years	79 (65.29)	46 (68.66)	2 (20.00)	0 (0.00)	0 (0.00)

phenomenon in a seven-level scale, with 1 indicating total lack of cooperation or total lack of influence, while 7—very good cooperation or very significant influence.

The following statistical measures were used for interpretation of the research results: scattering measures—coefficient of variation (V) and measures of central tendency—mean  $(\bar{x})$ , median (Me), dominant (D). Spearman's rank correlation coefficient was used to indicate the correlation between the ratings and then the t-Student test was used to determine its significance. Kruskal-Wallis test was used to identify statistically significant differences in ratings between industries, enterprise size and history. Statistical calculations were made using STATISTICA version 12.5.

# 4 Findings and Discussions

Polish respondents ranked low the level of existing cooperation between their companies and Belarusian companies (see Table 2). Most respondents declare simply lack of such activity. Analysis of the results obtained by industry, size and age shows that, although the mean scores for individual groups slightly differ from each other, the only statistically significant differences exist between:

Table 2 The level of cooperation between Polish companies and Belarusian companies

Companies		$\bar{x}$	$M_e$	D	$n_D$	V*
Declared lev	vel of cooperation					
Polish comp	panies total	1.99	1.00	1	236	79.39
Including		'				
Industry	Construction	1.78	1.00	1	54	83.04
	Wood and furniture	1.77	1.00	1	56	77.11
	Food	1.72	1.00	1	56	70.98
	Metal and machinery	2.59	2.00	1	35	76.95
	Kruskal-Wallis test (p < 0.050	00)				
	Н				p	
	14.6997				0.002	21
	Metal and machinery/Construct Wood and furniture 0.0466; M					
Employees	Up to 9 people (1)	1.46	1.00	1	69	78.12
	10–49 people (2)	1.86	1.00	1	98	81.52
	50–249 people (3)	2.19	1.00	1	60	78.57
	250 people and more (4)	3.05	3.00	1/4	9	54.54
	Kruskal-Wallis test (p < 0.050	00)				
	Н				p	
	42.8528				0.000	00
	Up to 9 people/50–249 people 250 people and more/Up to 9 250 people and more/10–49 p 250 people and more/50–249	people 0.0000 eople 0.0001				
Age	Up to 1 year	1.00	1.00	1	3	0.00
	1–3 years	1.39	1.00	1	25	94.40
	4–10 years	1.66	1.00	1	51	87.00
	More than 10 years	2.14	1.00	1	157	75.65
	Kruskal-Wallis test (p < 0.050	00)				
	Н				p	
	18.7381				0.000	)3
	1–3 years/More than 10 years	0.0280				

Source: Own study

<sup>\*</sup>Statistical measures:  $\bar{x}$ —mean,  $M_e$ —median, D—dominant,  $n_D$ —size dominant, V—coefficient of variation

- Assessments of respondents from metal and machine industry and other industries—metal and machine companies are more likely to cooperate with Belarusian companies, although the level of this cooperation is still very low and most of them do not cooperate (D = 1);
- Assessments of respondents from the largest companies and the other groups of companies as well as micro- and medium-sized enterprises—the largest companies undertake cooperation with the Belarusian companies more often and its intensity is higher than in the case of other groups of enterprises;
- Assessments of respondents from enterprises in the market from 1 to 3 years and the oldest companies—the longest acting companies are more likely to undertake cooperation with Belarusian companies, but its level is still very low and most of them do not cooperate (D = 1).

In all groups of surveyed companies (with the exception of companies that have been in the market for up to 1 year) there are strong or very strong variations in respondents' assessments.

Also Belarusian respondents ranked low the level of existing cooperation between their companies and Polish companies (see Table 3) and most respondents declared simply lack of such activity. Although the average assessments for individual groups of companies slightly differ from each other, the Kruskal-Wallis test indicates that these differences are statistically significant only for metal and machinery and construction companies. As in the case of assessments by Polish companies in all groups of examined companies (except for companies with the shortest history—up to 1 year) there is a strong or very strong variation in respondents' ratings.

Little optimism is evident also in assessments of the interest of Polish companies to undertake cooperation with Belarusian companies in the next 2–3 years (see Table 4). The declared willingness to start cooperation is only slightly different from its current level. A large percentage of the surveyed companies do not intend to undertake such cooperation in the near future. Although average ratings for interest in improving current trans-border cooperation for individual groups of companies are slightly different, the Kruskal-Wallis test indicates that these differences are statistically significant only for metal and machinery companies in relation to other industries and in the case of the largest and smallest companies—micro and small enterprises. Similarly to evaluations of the existing cooperation, there is a strong or even very strong variation of respondents' ratings of future cooperation (except for companies with the shortest history—up to 1 year).

A slightly higher optimism than in the case of Polish respondents is evident in the assessment of the level of interest in the improvement of the existing cooperation among the surveyed Belarusian companies (see Table 5). While average assessments for the level of interest in improving the current trans-border cooperation in individual groups of companies are slightly different, the Kruskal-Wallis test indicates that these differences are statistically significant only in the case of metal and machinery companies in relation to assessments of construction companies.

**Table 3** The level of cooperation between Belarusian companies and Polish companies

Companies		$\bar{x}$	$M_e$	D	$n_D$	V*
Declared level	of cooperation					
Belarusian co	mpanies total	2.10	2.00	1.00	59	69.96
Including						
Industry	Construction	1.72	1.00	1	41	68.64
	Wood and furniture	2.52	2.00	1	12	69.31
	Food	1.70	1.50	1	5	55.80
	Metal and machinery	3.38	3.00	2	4	50.51
	Kruskal-Wallis test (p <0	.05000)				
	Н				p	
	17.3676				0.000	6
	Metal and machinery/Con	struction 0	.0019			
Employees	Up to 15 people	2.18	1.00	1	9	84.76
	16-100 people	2.08	2.00	1	16	63.24
	101-250 people	1.72	1.00	1	12	74.00
	More than 250 people	2.22	2.00	1	22	68.28
	Kruskal-Wallis test (p < 0.0500)					
	Н	p				
	2.5177				0.472	1
Age	Up to 1 year	1.00	1.00	1	1	-
	1–3 years	2.00	2.00	1/3	3	54.77
	4–10 years	2.23	2.00	1	16	72.26
	More than 10 years	2.06	2.00	1	39	69.99
	Kruskal-Wallis test (p < 0	0.0500)				
	Н				p	
	1.1398				0.767	5

The correlation of Spearman's ranks for Polish respondents' assessments indicates that there is a correlation between ratings of current cooperation and willingness to strengthen it in the near future. The higher the surveyed companies assessed their current level of cooperation with competitors the higher was the level of their willingness to strengthen it in the future. This dependence was highest in the group of construction companies and in the group of the largest companies and those with longest history on the market (see Table 6).

In the case of Belarusian companies, the lack of dependence between the evaluation of the current cooperation and the possibility of tightening it in the near future is evident in the opinion of respondents from food and metal and machine companies and entities in the market for up to 3 years. In the other analyzed categories this correlation occurs also outside the group in small enterprises (which employ 16–100 people). It is moderate or high.

<sup>\*</sup>Statistical measures:  $\bar{x}$ —mean,  $M_e$ —median, D—dominant,  $n_D$ —size dominant, V—coefficient of variation

 Table 4
 Future cooperation between Polish and Belarusian companies

Companies		$\bar{x}$	$M_e$	D	$n_D$	V*
Degree of in	terest in strengthening coop	peration in the	e next 2-3 ye	ars		
Polish comp	panies total	2.91	3.00	1	136	65.51
Including		•	•	•	•	-
Industry	Construction	2.51	2.00	1	37	74.23
	Wood and furniture	2.45	2.00	1	37	69.97
	Food	2.54	2.00	1	35	71.19
	Metal and machinery	3.53	3.50	1/4	16	53.10
	Kruskal-Wallis test (p <	0.0500)				
	Н				p	
	19.1810				0.000	03
	Metal and machinery/Cor Wood and furniture 0.002		,	•		
Employees	Up to 9 people	2.56	2.00	1	36	68.71
	10–49 people	2.75	2.00	1	60	68.92
	50-249 people	3.08	3.00	1	33	62.64
	250 people and more	3.80	4.00	3	9	51.33
	Kruskal-Wallis test (p <	0.0500)				
	Н				p	
	13.8415				0.003	31
	250 people and more/Up 10–49 people 0.0130	to 9 people 0	.0064; 250 pe	cople and more/		
Age	Up to 1 year	2.00	2.00	1/2/3	1	50.00
	1–3 years	2.75	2.00	1	60	68.92
	4–10 years	3.08	3.00	1	33	62.64
	More than 10 years	3.80	4.00	3	9	51.33
	Kruskal-Wallis test (p <	0.0500)				
	Н				p	
	5.6655				0.129	91

The results are in line with a number of other studies which show that although Poles want to be seen as open and tolerant (Wenzel 2017) foreigners perceive Poland as a country of intolerant, stereotypical, secretive and unfriendly people who blame others for their own failures (Karp 2008). Only one in five Poles trusts a stranger and such a condition has lasted for years. Mistrust is a problem of the entire Polish society and national characteristic in a way (Czapliński and Panek 2015; Lis and Lis 2014; Centrum Badania Opinii Społecznej 2016).

Limited openness to newcomers from the East is associated with, among others, stereotypes (Tomaszuk 2016), prejudices (Radek 2012), historical legacy or personal experiences from previous contacts (Wenzel 2017). Publications (Centrum Badania Opinii Społecznej 2008) show relatively common in Poland unfavorable attitudes

<sup>\*</sup>Statistical measures:  $\bar{x}$ —mean,  $M_e$ —median, D—dominant,  $n_D$ —size dominant, V—coefficient of variation

Table 5 Future cooperation between Polish and Belarusian companies

Companies		$\bar{x}$	$M_e$	D	$n_D$	V*
Degree of inte	rest in strengthening cooperat	ion in the n	ext 2–3 year	s		
Belarusian co	ompanies total	3.22	3.00	1	31	58.25
Including		:	•	•	-	-
Industry	Construction	2.97	3.00	1	20	62.29
	Wood and furniture	3.45	3.00	4	7	53.47
	Food	2.60	3.00	3	4	51.92
	Metal and machinery	4.46	5.00	5	5	46.31
	Kruskal-Wallis test (p < 0	0.0500)				
	Н				p	
	17.3676				0.000	5
	Metal and machinery/Con	struction 0.	0019			
Employees	Up to 15 people	3.65	4.00	1	4	55.64
	16-100 people	3.17	3.00	3	12	57.74
	101-250 people	2.94	3.50	4	7	55.22
	More than 250 people	3.22	3.00	1	13	61.25
	Kruskal-Wallis test (p $< 0.0500$ )					
	Н				p	
	2.5177				0.472	1
Age	Up to 1 year	7.00	7.00	7	1	_
	1–3 years	3.33	2.50	1	3	81.98
	4–10 years	3.08	3.00	3	10	56.34
	More than 10 years	3.23	3.00	1	19	57.41
	Kruskal-Wallis test (p < 0	0.0500)				
	Н				p	
	1.1398				0.767	5

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towards Slavs from the former USSR. Although the latest research of the Polish social opinion, commissioned by the International Organization for Migration and carried out by the Ipsos Research Center in September 2016 (Ipsos 2016), indicate the increased confidence in Ukrainians and Belarusians and willingness to accept them as close friends, neighbors or colleagues, it is important to note that there is still a great resentment against Belarusians, Russians and Ukrainians. Poles declare greater tolerance for foreigners as subordinates rather than superiors (Anam 2017).

In the course of the research carried out abroad by the author of this text, the issue of partner treatment of foreigners has been repeatedly raised. There has often been an accusation that from the very beginning the Polish party regards itself better than the foreign partner and believes when arguing that only one party can be victorious and the other must be defeated and that in a discussion someone must be in a way destroyed, killed. The other party is treated as an opponent and not as a partner. Such

<sup>\*</sup>Statistical measures:  $\bar{x}$ —mean,  $M_e$ —median, D—dominant,  $n_D$ —size dominant, V—coefficient of variation

**Table 6** Correlations of Spearman's ranks for evaluation of the current level of cooperation and possibilities of its strengthening in the future

Polish companies total   Including   Construction   Wood and	
Industry Constructi	
Wood and	furniture 0.5919
Food	0.5639
Metal and	machinery 0.6167
Employees Up to 9 pe	ople 0.4269
10-49 peo	ple 0.5720
50-249 pe	ople 0.5880
250 people	e and more 0.7479
Age Up to 1 ye	ear –
1–3 years	0.4565
4–10 years	0.4608
More than	10 years 0.6119
Belarusian companies to	tal 0.5372
Including	
Industry Constructi	on 0.4106
Wood and	furniture 0.6283
Food	0.5708 (p > 0.0500)
Metal and	machinery $0.4964 \text{ (p} > 0.0500)$
Employees Up to 15 p	people 0.5383
16–100 pe	ople 0.3339
101–250 p	eople 0.4805
More than	250 people 0.6781
Age Up to 1 ye	ear –
1–3 years	0.1037 (p > 0.0500)
4–10 years	0.6349
More than	10 years 0.5645

an approach strongly distorts the possibility of fostering cooperation on trust-based relationships.

From the point of view of the research conducted, it was important to examine the influence of the so-called political "turbulence" on undertaking cooperation with foreign companies. While in the case of research conducted in Poland there was no problem with including such a question in the questionnaire, in Belarus investigation of the problem was impossible. There was no agreement that such a question would appear in the questionnaire addressed to the Belarusian companies. The subsequent analysis therefore concerns Polish respondents only (Table 7).

Political "turbulence" influences the undertaking of cooperation of Polish companies to a small degree. For most respondents as a whole and for the majority of respondents within the analyzed groups, this factor has absolutely no impact on this activity (dominant at level 1). The Kruskal-Wallis test indicates that there are no

**Table 7** The strength of influence of political "turbulence" on the undertaking of cooperation with Belarusian companies (Polish companies only)

Companies		$\bar{x}$	$M_e$	D	$n_D$	V*
Polish compa	nies total	2.89	2.00	1	159	71,25
Including						
Industry	Construction	2.55	2.00	1	36	76.87
	Wood and furniture	2.52	1.50	1	41	75.27
	Food	3.12	2.00	1	34	71.03
	Metal and machinery	3.01	3.00	1	28	67.36
	Kruskal-Wallis test (p <	0.0500)				
	Н				p	
	5.1567				0.1607	
Employees	Up to 9 people	2.67	1.00	1	45	80.97
	10–49 people	2.65	2.00	1	66	73.02
	50-249 people	3.15	3.00	1	37	65.14
	250 people and more	3.50	3.00	1	11	61.38
	Kruskal-Wallis test (p <					
	Н					
	9.7730				0.0206	
Age	Up to 1 year	1.33	1.00	1	2	43.30
	1–3 years	2.14	1.00	1	16	80.04
	4–10 years	2.51	1.00	1	36	76.48
	More than 10 years	3.07	3.00	1	105	68.47
	Kruskal-Wallis test (p <	0.0500)				
	Н				р	
	10.6725				0.0136	

statistically significant differences in ratings between individual groups of companies, but the analysis of the variation coefficient allows for the identification of strong or even very strong differentiation ratings of respondents within the same group of companies.

### 5 Conclusion

Subject literature highlights that the issue of trans-border cooperation on the eastern border of the European Union have a multispectral and varied character and undergo constant changes. However, knowledge on this topic remains insufficient and fragmented (Kosiedowski 2009). The analyses carried out in this text should contribute to enriching and completing some of the existing gaps.

Concluding the deliberations carried out in this text it should be stated that:

<sup>\*</sup>Statistical measures:  $\bar{x}$ —mean,  $M_e$ —median, D—dominant,  $n_D$ —size dominant, V—coefficient of variation

- 1. Respondents rated low their current cooperation with foreign firms (Polish or Belarusian accordingly), and most of them had not undertaken such cooperation at all. In the case of Polish respondents, the highest rating of current cooperation was given by respondents from the metal and machine branches, the biggest companies and those that had been active on the market longest. In the case of Belarusian respondents, the current level of cooperation was also very lowly rated, with differences in ratings between individual categories of companies being, aside from businesses in the metal and machine sector, statistically insignificant.
- 2. A higher optimism as far as ratings regarding the readiness to undertake cooperation with foreign firms are concerned is visible among Belarusian respondents (statistically significant differences in ratings occur only in the case of companies of the metal and machinery sectors in relation to companies from the construction sector). In the case of Polish businesses, statistically significant differences were noted only in the case of metal and machine companies in relation to the remaining branches and in the case of the biggest and smallest companies—micro and small businesses.
- 3. In the case of most categories of researched companies (both Polish and Belarusian) there is a relationship between the rating of current cooperation and the readiness to undertake cooperation in the near future. The higher firms rated their current cooperation with competitors, the higher they declared their readiness to strengthen such cooperation in the future.
- 4. Political "turbulence" influences the undertaking of cooperation of Polish companies with their Belarusian counterparts to a small degree. There was no possibility of studying the influence of this factor on the undertaking of cooperation by Belarusian entities with Polish firms.

Keeping the above in mind it should be stated that both Polish and Belarusian companies are not taking advantage of the possibilities stemming from cooperation with foreign firms. This occurs despite the existence of government documents that facilitate the undertaking of trans-border cooperation for years, the awareness of local authorities of its advantages, notations prioritizing the direction of development with Belarus and the realization of joint ventures within various EU projects. The majority of researched construction and industrial companies do not cooperate with foreign (Polish or Belarusian accordingly) entities at all, and their readiness to strengthen this cooperation in the near future is scarce. This picture should worry policymakers on both sides of the Poland-Belarus border. As mentioned before, the construction of cooperation structures on a trans-border scale is both a big challenge and an opportunity for border areas. It is therefore necessary to concentrate on actions that encourage the undertaking of cooperation by businesses, since as shown by the results of this research, firms that rate their current cooperation highly have a more optimistic attitude towards strengthening it in the future. The issue of the low level of trust in Polish society, and therefore also Polish companies, towards foreign entities from the East, trust which would most certainly help create partnerships with them, also remains exceedingly important. Without this, the possibilities of creating and developing network structures, including clusters, with a trans-border reach will be undermined.

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#### References

- Ackleson, J. (2005). Constructing security on the U.S. Mexico border. *Political Geography*, 24, 165–184.
- Anam, R. (2017). Tolerancja Polaków a obcokrajowcy w pracy [Tolerance of Poles vs foreigners at work]. [online] Accessed July 09, 2017, from http://www.egospodarka.pl/33182,Tolerancja-Polakow-a-obcokrajowcy-w-pracy,3,39,1.html
- Balibar, E. (2009). Europe as Borderland. *Environment and Planning D: Society and Space*, 27(2), 190–215.
- Balogh, P., & Pete, M. (2018). Bridging the gap: Cross-border integration in the Slovak–Hungarian Borderland around Štúrovo–Esztergom. *Journal of Borderlands Studies*, *33*(4), 605–622. https://doi.org/10.1080/08865655.2017.1294495.
- Cappelin, R., & Batey, P. W. J. (Eds.). (1993). Regional networks, border regions and European integration. London: Pion.
- Centrum Badania Opinii Społecznej. (2008). Stosunek Polaków do innych narodów [Attitude of Poles to other nations]. Warszawa: CBOS.
- Centrum Badania Opinii Społecznej. (2016). *Zaufanie społeczne* [Social trust]. Warszawa: CBOS. Coleman, M. (2005). U.S. border geopolitics and geoeconomics: the U.S. Mexico border as security/economy nexus. *Political Geography*, 24, 185–209.
- Czapliński, J., & Panek, T. (2015). Diagnoza społeczna 2015 [Social diagnosis 2015]. Contemporary Economics, 9(4), 16–547.
- Czerewacz-Filipowicz, K. (2016). Regionalizm i regionalizacja w Euroazjatyckiej Unii Gospodarczej. Wpływ EAUG na integrację handlową państw członkowskich z gospodarką światową [Regionalism and regionalization in the Eurasian Economic Union. Impact of EAUG on Member States' trade integration with the world economy]. Białystok: Oficyna Wydawnicza Politechniki Białostockiej.
- Dołzbłasz, S., & Raczyk, A. (2010). Współpracatransgraniczna w Polscepoakcesji do UE [Cross-border cooperation in Poland after accession to the EU]. Warszawa: Oficyna a Wolters Kluwer Business.
- Dörry, S., & Walther, O. J. (2015). Contested 'relational policy spaces' in two European border regions. Environment and Planning A, 47(2), 338–355.
- Główny Urząd Statystyczny. (2016). Rocznik statystyczny Rzeczpospolitej Polskiej 2016 [Statistical Yearbook of the Republic of Poland 2016]. Warszawa: GUS.
- Guo, R. (2015). Cross-border management. Theory, method and application. Berlin: Springer.
- Ipsos. (2016). *Postawy wobec cudzoziemców w Polsce wyniki badań opinii społecznej* [Attitudes towards foreigners in Poland Results of surveys on public opinion]. Warszawa: Ipsos.
- Karp, D. (2008). Jak oceniają nas pracujący w Polsce obcokrajowcy? [How do foreigners working in Poland evaluate us?]. [online] Accessed May 15, 2017, from http://gazetapraca.pl/ gazetapraca/1,90439,4232579.html

- Knippschild, R. (2011). Cross-border spatial planning: Understanding, designing and managing cooperation process in the German-Polish-Czech Borderland. *European Planning Studies*, 19 (4), 629–645.
- Kosiedowski, W. (Ed.). (2009). Pogranicze w trakcie przemian. Rozwój i współpraca transgraniczna regionów Polski Wschodniej i państw sąsiedzkich w kontekście integracji europejskiej [Borderlands in transition. Development and trans-border cooperation between the regions of Eastern Poland and neighbouring countries in the context of European integration]. Toruń: Wydawnictwo Naukowe UMK.
- Kosiedowski, W. (Ed.). (2013). Współczesna Białoruś. Społeczeństwo i gospodarka czasu przemian [Modern Belarus. Society and economy of transition time]. Toruń: Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika.
- Lechevalier, A., & Wielgohs, J. (Eds.). (2013). Borders and border regions in Europe: Changes, challenges and chances. Bielefeld: Transcript Verlag.
- Lis, A. M., & Lis, A. (2014). Zarządzaniekapitałami w klastrach: kapitałspołeczny, kulturowy, ekonomicznyisymboliczny w strukturachklastrowych [Capital management in clusters: social, cultural, economic and symbolic capital in cluster structures]. Warszawa: Difin.
- Miłkowski, A. (2013). Wschodnia granica Polski. Od Peryferii i izolacji do współdziałania [Eastern border of Poland. From periphery and isolation to cooperation]. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 307, 363–372.
- Ministerstwo Gospodarki. (2015). *Polska 2015. Raport o stanie gospodarki*, 2015 [Poland 2015. Report on the state of the economy, 2015]. Warszawa.
- Moraczewska, A. (2008). *TransformacjafunkcjigranicPolski* [Transformation of border functions of Poland]. Lublin: Wydawnictwo UMCS.
- O'Dowd, L. (2010). From a 'Borderless World' to a 'World of Borders': 'Bringing History Back in'. *Environment and Planning D: Society and Space*, 28(6), 1031–1050.
- Radek, R. (2012). Współpracatransgranicznajakonarzędzieprzełamywaniauprzedzeń I stereotypównapolskichpograniczach (wybraneproblemy) [Trans-border cooperation as a tool for overcoming prejudices and stereotypes on Polish frontiers (selected issues)]. In R. Łoś & J. Reginii-Zacharski (Eds.), Sąsiedztwoipogranicze międzykonfliktem a współpracą [Neighborhood and borderland Between conflict and cooperation] (pp. 55–88). Łódź: WydawnictwoUniwersytetuŁódzkiego.
- Reitel, B. (2006). Governance in cross-border agglomerations in Europe The examples of Basel and Strasbourg. *Europa Regional*, 14(1), 9–21.
- Sohn, C., & Reitel, B. (2016). The role of national states in the construction of cross-border metropolitan regions in Europe: A scalar approach. *European Urban and Regional Studies*, 23(3), 306–321.
- Sohn, C., Reitel, B., & Walther, O. (2009). Cross-Border Metropolitan Integration in Europe: The Case of Luxembourg, Basel, and Geneva. Environment and Planning C: Politics and Space, 27 (5), 922–939.
- Tomaszuk, A. (2016). Stereotypes in the perception of cross-border business partners (on the example of Podlasie entrepreneurs). *Economics and Management*, 8(2), 56–62.
- Tomaszuk, A. (2017). The importance of technological factors in the creation of cooperation. *Procedia Engineering*, 182, 701–708.
- Urząd Marszałkowski Województwa Podlaskiego. (2013). *Strategia Rozwoju Województwa Podlaskiego do roku 2020* [Podlaskie Voivodship Development Strategy until 2020]. Białystok: UMWP.
- Van Houtum, H., & Strűver, A. (2002). Borders, strangers, doors and bridges. *Space & Polity*, 6(2), 141–146.
- Wasiluk, A. (2017). Pro-innovative prerequisites for establishing the cooperation between companies (in the perspective of creation and development of clusters). *Procedia Engineering*, 182, 755–762
- Wasiluk, A., & Daniluk, A. (2013). *The possibilities of creating cross-border clusters*. Vilnius: Vilnius University Publishing House.

Wenzel, M. (2017). Stosunek do obcokrajowców w Polsce [Attitude to foreigners in Poland]. InstytutSprawPublicznych. [online] Accessed July 08, 2017, from http://www.isp.org.pl/files/7735258070251767001254129661.pdf

## Cooperation Between Competing Companies: The Example of Polish and Belarusian Enterprises



Tomaszuk Anna

**Abstract** Enterprises today have to deal with increasingly difficult and very complicated development conditions and such circumstances force them not only to compete, but also to cooperate with other entities in order to use their potential more efficiently. Wide availability of studies on cooperation between both national and regional enterprises results from the growing importance of cooperation in development strategies. This article attempts to fill in the gaps concerning cooperation on the regional level. The study covers neighboring regions of Poland and Belarus. The purpose of the article is to identify the level of cooperation with competitors in selected sectors of Polish and Belarusian enterprises and to define the prospects of its strengthening in the near future. The research involves more than 500 companies. It is found that both low level of current cooperation with competitors as well as insufficient optimism which can be observed in the assessment level of interest by surveyed enterprises which are interested in cooperation in the near future.

**Keywords** Cooperation · Enterprise · Region · Poland · Republic of Belarus

#### 1 Introduction

For many years, businesses have been taking note of profits stemming from cooperation (Powell 1990; Powell et al. 1996; Świadek and Wiśniewska 2015), and the economic effects of sharing the resources of firms are becoming key success factors (Strzyżewska 2011). The ability to build partnerships with business partners is one of the signs of the ability to achieve competitiveness (Adamik and Staniszewska 2008), and the situation of a large number of businesses—in particular those faced with a lack of capital means that cooperation with the competition becomes an interesting alternative.

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This issue becomes particularly significant in areas of inadequate investment, which could include the Podlaskie Province in the northeast of Poland, as well as neighboring Belarus. In relation to this, this article attempts to explore whether businesses based in the aforementioned areas make use of the opportunities presented by cooperation with their competitors. The aim of this article is to identify the level of cooperation of businesses with their Polish and Belarusian competitors and the possibility of its strengthening in the near future. The issue was examined by researching answers to the following questions: how do respondents rate current cooperation with competitors? To what extent do individual factors affect the current level of cooperation with competitors? To what extent are the respondent firms interested in strengthening cooperation with their competitors in the near future? To what extent can positive changes in individual factors influence an improvement in the cooperation of businesses with their competitors in the near future?

Critical literary analysis and statistical analysis of research conducted among 502 companies—381 Polish companies based in the Podlaskie Province (Poland) and 121 Belarusian companies have been used in this paper. Spearman's rank correlations have been used in the statistical analysis to determine the relationship between the current level of cooperation and possibilities of its strengthening in the future.

#### 2 Overview of the Literature

Although a widely understood concept, cooperation can be interpreted in different ways (Karwacka 2016; Daniluk and Tomaszuk 2016). In addition, many authors draw attention to the difficulties in interpreting this concept (Nowak 2012; Mazur 2011)—this can be justified by the large number of terms in literature and those used to define organizational cooperation. The most commonly used include cooperation, co-working and collaboration (Pierścieniak 2015). Regardless of the chosen term, a key element linking the definitions of cooperation is the awareness of a common goal. On this foundation, ties linking together individual entities are formed, based on the principle of inter-communication and leading to working in the common interest (Bembenek 2006). One can therefore claim that the premise to engaging in cooperation is a common goal, which brings about a necessity to strengthen one's potential in a given arena. (Hamel 1991; Håkansson 1987; Inkpen and Crossan 1996).

It is difficult to point out the best way of cooperation—in each individual case there is usually a unique and specific configuration of characteristics of both the organization and the environment that dictate the optimal method of structuring cooperation (Williamson 1991; Madhok 1995, 2006; Mayer and Argyres 2004). This stems from the differentiation of the specificity of individual organizations engaging in cooperation (Koźmiński and Latusek-Jurczak 2014; Sampson 2007; Sarkar et al. 2009). It is possible, however, to distinguish certain activities that can be undertaken by organizations aiming to achieve successful cooperation. These

include strategic planning of the cooperation within on organizational entity level; a system of communication in the partnership and the cooperation group; obtaining financial resources for the partnership; the decision-making process; the organization of a cooperation unit in the organizational entity; the division of tasks, obligations and responsibilities; the process of selecting employees for cooperation, the competency and attitude of employees towards cooperation; leadership; external support for the idea of cooperation and the reputation of the organization (Pierścieniak 2015).

The concept of cooperation is a phenomenon analyzed in management theory on many levels, including the aspect of undertaking cooperation by competing businesses (Karwacka 2016; Wasiluk 2016, 2017). The most common sources of achieving a competitive edge by cooperating businesses include relationship-specific resources created as a result of adaptation measures and investments made as part of the given relationship; activities stemming from the learning process; the replenishment and possibility of exchange of the resources of businesses in the given relationship and lower transaction costs as a result of mutual trust (Dyer and Singh 1998).

It is accepted that the main objectives of the cooperation of businesses are the combining of strength that facilitates the building of a coalition to help achieve common goals, the combining of complementary elements allowing for the creation of synergic effects and the common acquisition of knowledge and learning—both with and from the partner (Doz, Hamel 2006; Koźmiński and Latusek-Jurczak 2014). The most common motives for businesses undertaking cooperation are striving for innovation growth, filling a lack of resources, an increase in effectiveness, obtaining benefits from the learning process and lowering the level of uncertainty of the environment (Sudolska 2011).

Factors that encourage cooperation between organizations are above all mutually compatible goals, the complementarity of activities, an awareness of the positive significance of reaching common goals, the common realization of partial tasks, the voluntary nature of cooperation (freedom of accession and exit), formalism or non-formalism and the maintaining of economic and legal independence by the partners (Bembenek 2006). However, the most important factors obstructing cooperation include, above all, the constant rivalry stemming from the scarcity of market resources, a lack of trust between entities, legal obstacles linked with anti-monopoly measures as well as a strong culture of individualism that makes the realization of common goals difficult, if not impossible, as a result of the will of individual players to satisfy their own individual interests (Pachciarek 2011).

The elaboration of a model of cooperation that will contribute to a rise in the competitiveness of a business is not simple, and the effects of functioning in interorganizational relations can have negative as well as positive effects (Smith-Doerr and Powell 2005). One has to keep in mind that despite the anticipated added effect, a large proportion of alliances does not achieve the goals and anticipated benefits set out by the cooperating businesses (Kale and Singh 2009; Lunnan and Haugland 2008; Das and Teng 2000; Keasler and Denning 2009).

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#### 3 Research Methodology

The research part of this paper presents the partial results of research conducted within the international research project "Readiness of enterprises to create cross-border networks" implemented as a result of agreement between the Polish Academy of Science and the Belarusian State Academy of Science in the years 2014–2016. Representatives of companies (managerial staff) on both Polish and Belarusian side participated in the study. The research sample consisted of 502 companies—381 Polish companies and 121 Belarusian companies.

The research approach based on desk research was used to achieve the set goals, which allowed defining the level of cooperation and the factors that influence the level of cooperation. The following cooperation areas have been identified:

- · between companies in the industry,
- · between competing companies,
- with business environment institutions,
- · with the science and research sphere,
- with authorities (local and national level).

Respondents were asked to comment on the level of cooperation in each area and to indicate the degree of interest in cooperation (1–7 scale). Next, after a critical analysis of literature (e.g. Strzyżewska 2011; Górzyński 2006; Czakon 2007; Bengtsson and Kock 2014; Romanowska 1997; Ford and Håkansson 2013; Skalik 2002; Daszkiewicz 2007) and discussions with experts of the academic and business environment within each area, several to a dozen factors influencing the level of cooperation were identified. In terms of the area of cooperation with competing companies a list of 14 factors has been made:

- 1. extending the sales market;
- 2. joint advertising activities/product promotion;
- 3. subcontracting;
- 4. operation cost reduction (coordination of purchases, joint transport, storage);
- 5. rise of innovation potential (faster generating and implementing product and technology innovations);
- 6. products/services quality improvement;
- 7. access to the competitor's resources (personnel, technology, machines, equipment etc.);
- 8. possibility of realization of bigger contracts/projects;
- 9. possibility of participation in tenders/projects;
- 10. possibility of implementation of joint investment projects (ex. joint purchase of expensive technologies, equipment, etc.);
- 11. possibilities of implementation joint research and development activities;
- 12. access to financial institutions, support programs;
- 13. influencing the national and local authorities;
- 14. experience from previous cooperation.

Respondents commented on how each factor influences the level of cooperation and the extent to which positive changes in particular factors can improve the level of cooperation (in 1–7 scale). The aim of this article is to identify the level of Polish and Belarussian companies' cooperation with the competition and the prospects of its strengthening in the near future. The research problem was solved by answering the following research questions: How do respondents rate the level of current cooperation with competitors? To what extent do individual factors affect the current level of companies' cooperation with competitors? What is the degree of the researched companies' interest to strengthen their cooperation with competitors in the near future? To what extent can positive changes in particular factors contribute to improving business cooperation with competitors in the near future?

For the research results interpretation the following tools were used: the tabular form of data presentation which allowed to determine how the different categories were distributed in the research sample, the descriptive statistics which allowed to determine what was the ratio of the answers on the given answer variant to all answers given and nonparametric statistics which allowed to verify important differences in the answers.

#### 4 Research Results Interpretation

Respondents assessed the level of cooperation in six aspects, as shown in Table 1. When analyzing the respondents' assessments on the basis of arithmetic means it can be noticed that in every aspect the Belarusian respondents declared a higher level of cooperation. This was also confirmed by the analysis of the dominant value indicator

**Table 1** Evaluation of the current level of cooperation (in the opinion of Polish and Belarusian respondents)

Level of cooperation	Country	$\bar{x}$	Me	D	$n_D$	V
Cooperation between companies in the industry	Poland	3.94	4	4	90	40.29
	Belarusian	4.38	4	5	34	36.01
Cooperation between competing company	Poland	2.80	3	2	94	51.90
	Belarusian	3.23	3	3	41	44.98
Cooperation with business environment	Poland	3.07	3	3	93	49.88
institutions	Belarusian	4.21	4	4	31	38.40
Cooperation companies with science-research	Poland	2.51	2	1	134	62.05
sphere	Belarusian	3.64	3	3	34	44.63
Cooperation companies with the national	Poland	2.34	2	1	153	63.21
authorities	Belarusian	3.78	4	4	31	49.94
Cooperation companies with the local authorities	Poland	3.92	3	4	91	46.23
	Belarusian	4.07	4	4	24	47.76

Source: own study

Statistical measures: mean  $(\bar{x})$ , median (Me), dominant (D), size dominant  $(n_D)$ , coefficient of variation (V)

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Table 2	Impact	of	individual	factors	on	the	current	level	of	cooperation	between	competing
companie	s (in the	or	oinion of Po	lish res	pon	dent	s)					

$\bar{x}$	Me	D	$n_D$	V
3.14	3	1	100	58.47
2.51	2	1	151	64.56
3.07	3	1	107	56.33
2.86	3	1	127	61.03
2.80	3	1	120	59.62
3.09	3	1	109	57.64
2.75	2	1	128	62.28
3.38	3	1	90	55.21
3.17	3	1	105	58.60
2.72	2	1	148	66.22
2.59	2	1	147	63.85
2.83	2	1	131	64.24
2.79	2	1	128	62.11
3.08	3	1	100	56.79
	2.51 3.07 2.86 2.80 3.09 2.75 3.38 3.17 2.72 2.59 2.83 2.79	2.51 2 3.07 3 2.86 3 2.80 3 3.09 3 2.75 2 3.38 3 3.17 3 2.72 2 2.59 2 2.83 2 2.79 2	2.51     2       3.07     3       1     2.86       3     1       2.80     3       1     3.09       3     1       2.75     2       1     3.38       3     1       2.72     2       1     2.59       2     1       2.83     2       1     2.79       2     1	2.51         2         1         151           3.07         3         1         107           2.86         3         1         127           2.80         3         1         120           3.09         3         1         109           2.75         2         1         128           3.38         3         1         90           3.17         3         1         105           2.72         2         1         148           2.59         2         1         147           2.83         2         1         131           2.79         2         1         128

Source: own study

Statistical measures: mean  $(\bar{x})$ , median (Me), dominant (D), size dominant  $(n_D)$ , coefficient of variation (V)

(the same level was declared only in the case of cooperation with local authorities) and the median (which is concurrent for cooperation between companies in the industry and competing companies, in other cases a higher indicator for Belarusian respondents was observed).

The indicator of the declared level of existing cooperation in the examined aspects on the Polish side ranged from 2.34 to 3.94; for cooperation between competing companies it amounted to 2.80—only cooperation with national authorities and with the science-research sphere was lower (respectively 2.34 and 2.51). The results in all analyzed aspects can be considered very low—none of them reached the average level (in the scale 1 to 7 it is 4). This may be due to the low need for cooperation in general and no awareness of the benefits of synergy in many aspects. Representatives of Belarusian companies declared the level of cooperation respectively in the range of 3.23–4.38 and cooperation between competing companies was rated lowest.

Respondents assessed also the extent to which the individual factors affect the level of cooperation with competitors in the 1–7 scale where 1—no cooperation; 7—very strong cooperation (Table 2). When analyzing the opinions of Polish respondents the impact of each factor can be assessed as low (from 2.51 to 3.38 according to the arithmetic mean); in addition, for all the tested factors the dominant response was "complete lack of influence".

The most important factors for starting cooperation by Polish companies include the possibility of realization of bigger projects (3.38), the possibility of participating in tenders and projects (3.17) and extending the sales market (3.14). This is due in

Factor	$\bar{x}$	Me	D	$n_D$	V
Extending the sales market	3.52	3	1	25	53.02
Joint advertising activities/promotion	2.98	3	1	42	60.73
Subcontracting	3.93	4	4	27	44.99
Operation cost reduction	3.41	3	1	24	54.24
Rise of innovation potential	3.44	3	5	24	50.22
Products/services quality improvement	4.09	4	4/	24	46.38
			5		
Access to the competitor's resources	3.40	3	1/	23	52.75
			4		
Possibility of realization of bigger contracts/projects	4.12	4	4/	22	46.65
			5		
Possibility of participation in tenders/projects	4.12	4	5	28	45.15
Possibility of implementation of joint investment projects	3.40	3	1	34	59.91
Possibilities of implementation joint research and development	3.26	3	1	29	57.03
activities					
Access to financial institutions, support programs	3.26	3	1	33	59.15
Influencing the national and local authorities	3.09	3	1	37	63.06
Experience from previous cooperation	3.87	4	5	24	48.59

**Table 3** Impact of individual factors on the current level of cooperation between competing companies (in the opinion of Belarusian respondents)

Source: own study

Statistical measures: mean  $(\bar{x})$ , median (Me), dominant (D), size dominant  $(n_D)$ , coefficient of variation (V)

part to the specific nature of individual industries when a project may exceed the capacity of individual companies and decisions regarding selection are made by tender (Wasiluk 2016). The factors of the smallest importance were: joint promotional activities (2.51), the possibility of implementation joint research and development activities (2.59) and the possibility of joint investment projects (2.72). These results are in line with the image of Polish companies presented in papers on innovation which show that Polish companies are not interested in undertaking R&D activities (Baczko 2012) and money on innovation is spent more often on purchasing of machinery and equipment rather than on conducting research and development activities (Bromski 2013).

When analyzing the opinions of Belarusian respondents (Table 3) much higher significance of each of the examined factors can be noticed in terms of its impact on the current level of cooperation between competing companies. This results among others from the declared higher level of cooperation with the competition. The biggest differences in assessments of individual factors are evident in case of products and services quality improvement (difference 1 according to the arithmetic mean), possibility of participation in tenders and projects (0.95) and subcontracting (0.86). The most important factors include the possibility of participation in tenders and projects (4.12), the possibility of implementation joint contracts and projects

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Table 4	The degree	of the examined	companies'	interest in closer	cooperation	in the near future

Level of cooperation	Country	$\bar{x}$	Me	D	$n_D$	V
Cooperation between companies in the industry	Poland	3.62	4	4	98	41.89
	Belarusian	4.81	5	5	33	33.45
Cooperation between competing company	Poland	3.01	3	3	93	50.20
	Belarusian	3.95	4	5	28	37.47
Cooperation with business environment	Poland	3.69	4	4	84	43.49
institutions	Belarusian	4.29	4	4	39	35.79
Cooperation companies with science-research	Poland	3.20	3	3	88	52.00
sphere	Belarusian	3.99	4	4	46	37.92
Cooperation companies with the national	Poland	2.92	3	1	101	56.92
authorities	Belarusian	3.79	4	4	27	51.94
Cooperation companies with the local authorities	Poland	3.75	4	4	91	46.76
	Belarusian	4.03	4	4	31	46.49

Source: own study

Statistical measures: mean  $(\bar{x})$ , median (Me), dominant (D), size dominant  $(n_D)$ , coefficient of variation (V)

(4.12) and the possibility of products and services quality improvement (4.09)—therefore some analogy can be noted with the Polish respondents.

In the case of the least significant factors the Belarusian respondents' opinions are also partly similar to those of Polish respondents. The following factors may be distinguished: joint advertising and promotional activities (2.98) and the possibility of implementing joint R&D projects (3.26); in addition, there are also factors regarding influence on the national and local authorities (3.09) and access to financial institutions and support programs (3.26), which may be related to the economic system in which the examined entities are located.

In view of these considerations, it seems interesting to examine the degree of interest in cooperation with competitors in the near future (Table 4). Similarly to the current level of cooperation all aspects of cooperation examined with the prism of the surveyed companies' interest in its development were assessed higher by the Belarusian respondents. Differences in perceptions are in the range of 0.28 (for the degree of interest in closer cooperation with local authorities) to 1.19 (for the degree of interest in closer cooperation within the industry); in the case of the examined companies' interest in closer cooperation with the competition the difference is 0.94. In both cases the optimism about interest in closer cooperation with competitors is very moderate (3.01 for Polish respondents and 3.95 for Belarusian respondents)—only the interest in cooperation with the national authorities was ranked lower (2.92 and 3.79 respectively).

Moderate optimism can be observed when comparing the current level of cooperation in each aspect with the degree of interest in strengthening it in almost all the studied areas. Only in the case of cooperation with local authorities the declared level of strengthening cooperation is lower in both countries, which can be explained by the fact that the circumstances of cooperation with the sphere of authorities in the

Factor	$\bar{x}$	Me	D	$n_D$	V
Extending the sales market	3.65	4	1	72	53.44
Joint advertising activities/promotion	3.17	3	1	96	54.84
Subcontracting	3.44	3	1	78	51.85
Operation cost reduction	3.58	4	1	78	51.36
Rise of innovation potential	3.41	4	4	88	52.69
Products/services quality improvement	3.52	3	1	80	53.33
Access to the competitor's resources	3.24	3	1	95	56.02
Possibility of realization of bigger contracts/projects	3.83	4	5	79	47.99
Possibility of participation in tenders/projects	3.59	4	1	75	51.19
Possibility of implementation of joint investment projects	3.28	3	1	97	55.95
Possibilities of implementation joint research and development activities	3.14	3	1	99	56.22
Access to financial institutions, support programs	3.38	3	1	90	54.75
Influencing the national and local authorities	3.21	3	1	96	57.02
Experience from previous cooperation	3.00	3	1	87	54.84

**Table 5** Influence of positive changes within particular factors on improving cooperation between competing companies in the near future in the opinion of Polish respondents

Source: own study

Statistical measures: mean  $(\bar{x})$ , median (Me), dominant (D), size dominant  $(n_D)$ , coefficient of variation (V)

past were not favorable (Wasiluk 2016). In addition, Polish respondents are not interested in maintaining even their current level of cooperation within the industry.

Optimistic in terms of strengthening cooperation with the competition seems to be the fact that in both cases the dominant indicator turned out to be higher than the declared level of cooperation (the dominant assessment of the current level of cooperation on the Polish side was 2; indicator of interest in strengthening cooperation was 3 and in the case of Belarusian companies the indicator increased from 2 for the current level of cooperation to 4 for the degree of strengthening it). However, in both countries, the degree of strengthening cooperation with competitors is below the average (analyzing the arithmetic mean).

Respondents were also asked to what extent the positive changes in individual factors could influence improvement of the level of cooperation with competitors (Tables 5 and 6). Very moderate optimism can be noticed when analyzing the assessments of Polish respondents. The impact of each factor was ranked as at least 3 (analyzing the arithmetic mean for the assessments rate), but none of the factors reached the mean level (4). This is probably due to quite low interest in strengthening cooperation with competition in general. The most important factors include: the possibility of realization of bigger orders and projects (3.83); the opportunity to participate in tenders and projects (3.59) and the expansion of sales markets (3.65)—therefore the same factors that had the greatest impact on the level of the existing cooperation. On the other hand, while analyzing factors of the least importance in the creation of future cooperation we can notice the low impact of prior cooperation (3.00)—which is quite obvious given the low level of current

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**Table 6** Correlations of Spearman's ranks for evaluation of the current level of cooperation and possibilities of its strengthening in the future

	Poland	Belarus
Evaluation of the current level of cooperation and possibilities of its strengthening in the future	0.653	0.574
Factors		
Extending the sales market	0.678	0.785
Joint advertising activities/promotion	0.664	0.755
Subcontracting	0.656	0.748
Operation cost reduction	0.651	0.639
Rise of innovation potential	0.652	0.718
Products/services quality improvement	0.663	0.675
Access to the competitor's resources	0.684	0.655
Possibility of realization of bigger contracts/projects	0.655	0.673
Possibility of participation in tenders/projects	0.681	0.687
Possibility of implementation of joint investment projects	0.627	0.672
Possibilities of implementation joint research and development activities	0.639	0.761
Access to financial institutions, support programs	0.646	0.724
Influencing the national and local authorities	0.694	0.756
Experience from previous cooperation	0.730	0.613

Source: own study

Note: For all correlation coefficients, p < 0.05

cooperation; opportunity to participate in joint R&D projects—3.14 (respondents considered this factor insignificant also when examining the influence of different factors on current level of cooperation) and joint promotional and advertising activities—3.17 (this factor was also of minor importance when examining its influence on current level of cooperation).

Slightly higher optimism can be noticed when analyzing the answers of the Belarusian respondents. In their opinion positive changes in each identified factor will contribute to improving cooperation between competitors to a higher degree than indicated by Polish respondents (analyzing the assessment indicator according to arithmetic mean the influence of five factors was ranked as at least average). Respondents ranked the highest importance to the possibility of realization of bigger contracts/projects (4.50); opportunity to participate in projects (4.43) and products and services quality improvement (4.32). There were also no changes of the least significant factors in the opinion of Belarusian respondents—the respondents rated lowest the influence on national and local authorities (3.25); joint promotional and advertising activities (3.32) and access to financial institutions and support programs (3.43).

A number of positive correlations were also noted in the respondents' answers (Table 6) with the use of Spearman's correlations. By analyzing the relationship between the current level of cooperation and the interest in its strengthening it can be stated that there is a high positive relationship in the case of Polish companies and moderate in the case of Belarusian companies. When analyzing the dependency

between the assessment of the influence of factors on existing cooperation and the assessment of possibilities for its improvement in the future we can notice a significant correlation for all responses, with a higher dependence (for 11 factors) on the Belarusian side. This leads to the conclusion that the increase in rating the factors that influence the current level of cooperation is accompanied by the increase in the average level of assessments of influence of positive changes in these factors on starting cooperation in the future.

#### 5 Conclusion

The analyses carried out point to a low level both of current cooperation and of the readiness to strengthen it in both research groups. The higher level of most indicators in the case of Belarusian firms can be explained by the somewhat higher level of psychological readiness to undertake cooperation as a whole—Poland is a nation with a deeply rooted culture of individualism.

Regardless of the country of origin, cooperation with the competition is one of the lowest (in the case of Polish firms) or even the lowest (in the case of Belarusian firms) rated areas of cooperation, with the level of readiness to undertake cooperation in the future also below average. In addition to this, an analysis of the factors that influence the current level of cooperation (as well as an analysis of the effect of positive changes of given factors on the improvement of cooperation) show their low significance in the researched aspect. Therefore, one should consider which factors could improve the readiness of businesses to undertake cooperation with their competitors, wherein the awareness of business owners that building partnerships with competitors can have a meaningful influence on a later rise in their competitiveness can have a key significance.

#### References

Adamik, A., & Staniszewska, K. (2008). Zarządzanie współpracą z partnerami biznesowymi z wykorzystaniem rozwiązań IT [Managing cooperation with business partners with IT solutions].
In S. Lachiewicz & A. Zakrzewska-Bielawska (Eds.), Zarządzanie przedsiębiorstwem w warunkach rozwoju wysokich technologii [Business management in the context of high technology development] (pp. 15–16). Politechnika Łódzka: Łódź.

Baczko, T. (2012). Raport o innowacyjności gospodarki Polski w 2012 roku [Report on the innovativeness of the Polish economy in 2012]. Warszawa: Instytut Nauk Ekonomicznych PAN.
Bembenek, B. (2006). Wokół koncepcji współdziałania [Around the concept of cooperation]. Studia Europejskie, 5, 34–36.

Bengtsson, M., & Kock, S. (2014). Coopetition – Quo Vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, 43(2), 180–188.

Bromski, K. (Ed.). (2013). Współpraca nauki i biznesu. Doświadczenia i dobre praktyki wybranych projektów w ramach Programu Operacyjnego Innowacyjna Gospodarka na lata 2007-2013

- [Experiences and good practices of selected projects under the Operational Program Innovative Economy 2007-2013]. Warszawa: PARP.
- Czakon, W. (2007). Dynamika więzi międzyorganizacyjnych przedsiębiorstwa [The dynamics of interorganizational enterprise ties]. Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach.
- Daniluk, A., & Tomaszuk, A. (2016). Conditions for development of companies' cooperation and entrepreneurship. In *The 9th International Scientific Conference Business and Management* 2016: Conference Proceedings, Vilnius, 12–13 May 2016.
- Das, T. K., & Teng, B. (2000). Instabilities of strategic alliances: An internal tensions perspective. *Organization Science*, 11, 77–101.
- Daszkiewicz, N. (2007). Małe i średnie przedsiębiorstwa. Szanse i zagrożenia rozwoju [Small and medium companies. Development opportunities and threats]. Warszawa: CeDeWu.
- Doz, Y. L., & Hamel, G. (2006). Alianse strategiczne: sztuka zdobywania korzyści poprzez współprace [Strategic alliances: The art of benefiting from collaboration]. Gliwice: Helion.
- Dyer, J. H., & Singh, H. (1998). The rational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of management Review*, 23(4), 660–679.
- Ford, D., & Håkansson, H. (2013). Competition in business networks. *Industrial Marketing Management*, 42, 1017–1024.
- Górzyński, M. (2006). System wspierania gron przedsiębiorczości. Publikacja podsumowująca [Entrepreneurship grapes support system. Summary report]. Rzeszów: IG WSIiZ.
- Håkansson, H. (1987). *Industrial technological development. A network approach*. London: Croon Helm.
- Hamel, G. (1991). Competition for competence and inter-partner learning within international strategic alliances. *Strategic Management Journal*, 12, 83–104.
- Inkpen, A. C., & Crossan, M. (1996). Believing is seeing: Joint ventures and organizational learning. *Journal of Management Studies*, 32, 596–618.
- Kale, P., & Singh, H. (2009). Managing strategic alliances: What do we know, and where do we go from here? *Academy of Management Perspectives*, 23, 45–62.
- Karwacka, M. (2016). Siła współpracy. Relacje przedsiębiorstw z organizacjami pozarządowymi w kontekście społecznej odpowiedzialności biznesu [Strength of cooperation. Companies relationships with non-governmental organizations in the context of corporate social responsibility]. Kraków: Nomos.
- Keasler, T. R., & Denning, K. C. (2009). A re-examination of corporate strategic alliance. New market responses. *Quarterly Journal of Finance and Accounting*, 48, 21–40.
- Koźmiński, A., & Latusek-Jurczak, D. (Eds.). (2014). Relacje międzynarodowe w naukach o zarządzaniu [International relationships in management sciences] (pp. 47–48). Warszawa: Oficyna Wolters Kluwer business.
- Lunnan, R., & Haugland, S. A. (2008). Predicting and measuring alliance performance: A multidimensional analysis. Strategic Management Journal, 29, 545–556.
- Madhok, A. (1995). Opportunism and trust in joint venture relationships: an exploratory study and a model. *Scandinavian Journal of Management, 11*(1), 57–74.
- Madhok, A. (2006). How much does ownership really matter? Equity and trust relations in joint venture relationships. *Journal of International Business Studies*, 37, 4–11.
- Mayer, K. J., & Argyres, N. S. (2004). Learning to contract: Evidence from the personal computer industry. *Organization Science*, 15(4), 394–410.
- Mazur, J. (2011). Współpraca przedsiębiorstw w teorii i praktyce polskiej. [Cooperation of enterprises in Polish theory and practice] Zeszyty Naukowe Kolegium Gospodarki Światowej [Scientific Papers of College of World Economy] (Vol. 32, pp. 290–314). Warszawa: Oficyna Wydawnicza SGH.
- Nowak, D. (2012). Wpływ współpracy i współdziałania na wybrane obszary funkcjonowania przedsiębiorstwa wyniki badań [Impact of collaboration and cooperation on selected areas of company functioning results of research]. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse. Rynki finansowe, 55, 685–688.

- Pachciarek, H. (2011). Czynniki sprzyjające i utrudniające współpracę pomiędzy organizacjami [Factors conducive and hindering cooperation between organizations]. Master of Business Administration, 1(116), 30–42.
- Pierścieniak, A. (2015). Potencjał organizacji do współpracy zewnętrznej ujęcie teoretyczne i metodyka pomiaru [Organization's potential for external cooperation theoretical approach and measurement methodology]. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.
- Powell, W. W. (1990). Neither market nor hierarchy: Network form of organization. *Research in Organizational Behaviour*, 12, 295–336.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41, 116–145.
- Romanowska, M. (1997). Alianse strategiczne przedsiębiorstw [Strategic alliances of companies]. Warszawa: PWE.
- Sampson, R. C. (2007). R&D alliances and firm performance: The impact of technological diversity and Alliance organization on innovation. *Academy of management Journal*, 50(2), 364.
- Sarkar, M. B., Aulakh, P. S., & Madhok, A. (2009). Process capabilities and value generation in alliance portfolios. *Organization Science*, 20(3), 583–600.
- Skalik, J. (Ed.). (2002). Zmiana warunkiem sukcesu. Integracja, globalizacja, regionalizacja wyzwania dla przedsiębiorstw [Change the condition for success. Integration, globalization, regionalization business challenges]. Wrocław: Wydawnictwo Akademii Ekonomicznej we Wrocławiu.
- Smith-Doerr, L., & Powell, W. W. (2005). *Networks and economic life*. New York: Russell Sage Foundation-Princeton University Press.
- Strzyżewska, M. (2011). Współpraca między przedsiębiorstwami odniesienie do polskiej praktyki [Cooperation between companies reference to Polish practice]. Warszawa: Oficyna Wydawnicza SGH.
- Sudolska, A. (2011). Uwarunkowania budowania relacji proinnowacyjnych przez przedsiębiorstwa w Polsce [Conditions of building pro-innovation relations by companies in Poland]. Toruń: Wydawnictwo UMK.
- Świadek, A., & Wiśniewska, J. (Eds.). (2015). Współpraca przedsiębiorstw a innowacje i transfer technologii: wybrane aspekty [Business cooperation and innovation and technology transfer: Selected aspects]. Szczecin: Naukowe Wydawnictwo IVG.
- Wasiluk, A. (2016). Prerequisites for undertaking and developing cooperation by industrial and construction companies. In *The 9th International Scientific Conference Business and Manage*ment 2016: Conference Proceedings, Vilnius, 12–13 May 2016.
- Wasiluk, A. (2017). Pro-innovative prerequisites for establishing the cooperation between companies (in the perspective of creation and development of clusters). *Procedia Engineering*, 182, 755–762.
- Williamson, O. E. (1991). Strategizing, economizing, and economic organization. Strategic Management Journal, 12(8), 75–94.

# Part V Tourism and Marketing

### The Enforcement of Air Passenger Rights: An Analysis and Comparison of Claims Management Companies and Recently Established Conciliation Bodies



#### Claudia Hipp

Abstract Based on a regulation the European Union issues common rules on compensation and assistance to air passengers in the event of denied boarding and of cancellation or long delay of flights. Nevertheless, since the regulation came into force in February 2005, one could observe that the legal framework itself has suffered from many undefined terms and loopholes, so that it had to be supplemented by an increasing body of case law. Several reasons like the unclear legal situation, high transaction costs for a lawsuit in relation to a relatively low amount of compensation and the strategical behavior of the airlines not to handle passengers' complaints in a correct manner, led to the situation that affected air passengers were deterred from enforcing their rights. The objective of the paper is to analyze, how new business models in form of claims management companies (e.g. Flightright, EUclaim, FairPlane, ... etc.) have successfully established themselves on the market. In comparison, as another effective tool for the enforcement of air passenger rights, recently founded conciliation bodies are taken into consideration; whereby the Conciliation Body for Public Transport in Germany serves as an exemplary model.

**Keywords** Enforcement of air passenger rights  $\cdot$  Consumer protection  $\cdot$  EU Regulation (EC) No 261/2004  $\cdot$  Conciliation body for public transport  $\cdot$  Claims management companies  $\cdot$  Alternative dispute resolution (ADR)

#### 1 Introduction

Air passenger rights as an important part of consumer protection policy have controversially been discussed on EU level for more than one decade. As a consequence of deregulation processes in the field of public transport, the Air Passenger Rights Regulation (EC) No 261/2004 of the European Parliament and Council of the

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European Union represents the main legal framework in EU Law (European Parliament and Council of the European Union 2004). On the one hand it was established in order to strengthen air passenger rights in cases of denied boarding, of cancellations or long delay of flights, on the other hand, thus the regulation should ensure that airlines act under harmonized conditions in a liberalized market (compare as well recital 4 of Regulation (EC) No 261/2004). Originally the adoption of the regulation was predicted to be a milestone for the improvement of air passenger rights since it went into force on February 17th in 2005. From a substantive legal standpoint it is even the case. However, for several reasons the enforcement process of the legal entitlements on basis of the regulation remains arduous. Although national enforcement bodies have been established by all EU member states (as well by Iceland, Norway and Switzerland which have also adopted the legislation), there is a widespread reluctance among airlines to deal with passenger claims in a correct manner, e.g. they generally deny paying compensation for cancelled flights due to alleged extraordinary circumstances (Bollweg 2013). In addition, the legal framework of the regulation consists of many undefined terms and loopholes and therefore it has been extended by a huge body of case law, especially by decisions of the European Court of Justice. The high level of legal uncertainty and the related risk of transactions costs for a lawsuit led to a lack of enforcement of air passenger rights.

This status quo has created a lucrative business opportunity for specialized service providers such as Flightright, EUclaim, FairPlane...etc. They advertise to claim against the airlines without any cost risk for the affected passengers; compare as an example the website of EUclaim (EUclaim, n.d.).

Meanwhile this gap of enforcement was also recognized by the German legislator which introduced the obligation for every airline flying to and from an airport in Germany to take part in a conciliation procedure in cases of service disruptions, in which consumers were affected. Both procedures, those offered by service providers and those by conciliation bodies, have made significant contributions to the enforcement of air passenger rights. The paper intends to give a short insight into the current legal situation of air passenger rights on EU level. It analyses which obstacles prevent passengers from enforcing their rights. Furthermore, it focuses on different routes of enforcement offered on the one hand by claims management companies (like Flightright, EUclaim, FairPlane, ... etc.) and on the other hand by the Conciliation Body for Public Transport in Germany (söp). Both institutions are analyzed concerning their legal framework and procedures. Differences and similarities are figured out by a comparison. As a conclusion it is summarized how they interrelate with each other, which incentives they offer in order to reduce the customer's inhibition threshold to enforce his/her entitlements and that both have made contributions to the enforcement of air passenger rights.

#### 2 Air Passenger Rights Under EU Legislation

The Air Passenger Regulation (EC) No 261/2004 sets up standards in the event of denied boarding, cancellation and long delay of flights. Re-imbursement of the ticket price, re-routing to the final destination, rights to compensation and taking care of the passengers—whereby especially the needs of passengers with reduced mobility and unaccompanied children have to be taken into consideration—are content of the legislation. It is applicable on all flights which depart from an airport in the EU and for all incoming flights into an airport in EU (that is to say if the air carrier is a so called "community carrier" concerning Art. 2c of the Regulation (EC) No 261/2004. The core aspect of the regulation can be seen in the compensation regime established in Art. 7. In the event of denied boarding (see Art. 4 of the Regulation) and in case of a flight cancellation—if the passenger was not informed in good time concerning Art. 5 of the Regulation—the passenger is entitled to receive compensation pursuant to Art. 7. With the help of Art. 7 the EU Legislator established a so called "flat-rate damage compensation", which means that depending on the flight distance a lump-sum for the compensation is fixed:

- 250 EUR for all flights up to 1500 km (category 1)
- 400 EUR for all intra-EU flights of more than 1500 km and all other flights between 1500 and 3500 km (category 2)
- 600 EUR for all other flights not falling under category 1 or 2 (category 3), that is to say of more than 3500 km

This compensation is independent of the actually caused damage and as well independent of the ticket price. Thus it differs fundamentally from other legal compensation systems; e.g. in railway sector where a ticket price reduction in cases of long delays is foreseen (Your Europe 2017). Another special feature of the compensation system represents Art. 5 according to which the above mentioned entitlement of compensation can be excluded if the air carrier can prove that the cancellation

- was caused by extraordinary circumstances (which means beyond the airline's control)
- and therefore the cancellation could not have been avoided, even if the airline had taken all reasonable measures.

Also this exculpation in so to say cases of "force majeure" is not typical in the transport sector, e.g. in railway sector it does not exist—the above mentioned ticket price deduction cannot be excluded due to any circumstances that are beyond the railway company's control (Your Europe 2017). Lately after the regulation went into force it had to be recognized that in practice it suffered from several not sufficiently defined terms and loopholes. Since that the European Court of Justice (ECJ) interpreted the regulation in several cases. The term "extraordinary circumstances" which is the core of many debates of the regulation generated a wide jurisdiction. As

a definition of the term "extraordinary circumstances" there is only recital 14 of the regulation which numerates cases like:

- political instability;
- · meteorological conditions;
- · security risks;
- unexpected flight safety issues;
- · and strikes.

This represents an exemplary list, and does not give an exhaustive enumeration. The most famous decision of the ECJ dealt with the case Sturgeon versus Condor Flugdienst GmbH which has been confirmed several times in the meantime (European Court of Justice 2009). The ECJ decided that "Passengers whose flights have been cancelled and passengers affected by a flight delay suffer similar damage, consisting in a loss of time, and thus find themselves in comparable situations for the purposes of the application of the right to compensation laid down in Article 7 of Regulation (EC) No 261/2004" (European Court of Justice 2009). Therefore delayed passengers shall also have a right to compensation pursuant to Art. 7 Regulation (EC) No 261/2004 "when they reach their final destination 3 h or more after the arrival time originally scheduled by the air carrier" (European Court of Justice 2009). This means that also in the event of long delays (minimum 3 h, no matter which flight distance) the passengers have the right to be compensated according to the above mentioned standards (see Art. 7 Regulation (EC) No 261/2004). This decision was discussed controversially concerning the competencies of the ECJ. But ever since the ECJ has been going on to supplement the regulation with a wide body of case law. Its contributions to the application of the regulation are that accepted that it is intended to overtake parts of the jurisdiction into the revised version of the regulation (European Parliament and Council 2013a). Finally, in theory Regulation (EC) No 261/2004 can be seen as a significant improvement of air passenger rights. But in practice it encounters obstacles like the unclear legal situation, which cannot be resolved on the basis of a steadily growing body of case law.

# 3 Obstacles Which Prevent Passengers to Enforce Their Rights

One year after the Regulation (EC) No 261/2004 went into force the European Commission launched an independent review of its functioning which was undertaken by a consulting company in 2010 (Steer Davies Gleave (SDG) 2010). A second review on behalf of the European Commission made by the same company followed in 2012 (Steer Davies Gleave (SDG) 2012). Both evaluations proved that most passengers do not enforce their claims against the airlines. There are several reasons. Many passengers still do not know their rights (Finanztip 2017). Although the airlines are obliged to inform their passengers about the regulation (compare

recital 20 of Regulation (EC) No 261/2004) many of them do not fulfill this duty. It can be even observed that the air carriers adopted a strategic behavior to avoid paying a compensation (Bollweg 2013). Therefore they developed for example the following modes of behavior: Some airlines ignore passengers' claims in general, others deny the passengers entitlement due to alleged "extraordinary circumstances" (e.g. they wrongly allege bad weather conditions or they refer to technical problems which are not accepted as extraordinary circumstances because they are not beyond the airline's control). The affected passengers find themselves in a weaker position due to their lack of information which is the typical consequence of asymmetric information, in which consumers are often caught in relation to the stronger enterprises (Decker 2017; Damania and Round 2000). In this situation the consumers are in need of assistance. Normally consumers would charge a lawyer with the case or easily surrender following their rights. Due to the risk of high transaction costs in relation to low amounts of compensation, it is comprehensible that most passengers refrain from starting a lawsuit, also referred to as a "rational lack of interest" (Berlin 2014). To show an example: Procedural costs for a trial with a litigation value of 600 Euro exceed more than 750 Euro concerning German requirements, including fees for the lawyers on both sides and court fees (Geier 2016). Moreover the court fees and as well at least a part of the fees for the claimant's lawyer have to be paid in advance. In case of success all fees have to be reimbursed by the party which loses the trial—concerning the "loser pays rule". Especially when the litigation value is extremely high or very low consumers remain inactive; this status is also known as so called "rational inactivity" (Augenhofer 2012).

So, how can the financial risk and thereby the inhibition threshold of the passengers be reduced?

#### 4 Different Routes of Enforcement of Air Passenger Rights

There are two routes of enforcement which have established in the last years. On the one hand a market solution in form of claims management companies like Flightright, EUclaim, FairPlane...etc. and on the other hand conciliation bodies which had to be created due to legal obligations of the German Legislator. The large number of cases and high success rates of claims management providers (e.g. EUclaim, n.d.) indicate that it must be a successful model. On the other hand also the Conciliation Body for Public Transport in Germany (söp) generates a growing number of cases in the field of air transport; and the acceptance rate of its conciliation recommendations of more than 90% in the flight sector in 2014 and 2015 (söp 2017) also implies a story of success.

At present it is also discussed whether the opportunities for group actions and so called small claim procedures as further routes of enforcement should be expanded in the EU Member States in order to strengthen the enforcement of air passenger rights (Augenhofer 2012). These procedures could also help to overcome rational inactivity and improve consumer protection as well in other fields than air passenger

rights (Cortés 2016). Whereas this paper intends to focus on the existing routes of enforcement of air passenger rights; it analysis the two models mentioned above concerning their legal construction, scope of application, accessibility, time of procedure and other positive effects. By the end of this paragraph a short comparison is drawn.

#### 4.1 Claims Management Companies

Flightright, FairPlane, EUclaim, Flug-Rechte.de, AirHelp, refund.me, ClaimFlights, Flugrecht,...etc. are the best known claims management companies which have established on the market in Germany and as well in many other countries. They advertise to help passengers to enforce their rights under Regulation (EC) No 261/2004 without any financial risk. This means that their fees only have to be paid by the client in case of success and will be directly deducted from the amount of compensation. If the procedure is not successful the costs for the efforts stay at the claims management company. As we have seen above the legal situation and the actual circumstances of the flight are often unclear. How can these service providers work cost efficiently and achieve high rates of success of more than 90% as they publish on their websites? And why are they allowed to work with a contingency fee which is for lawyers in general forbidden by law?

#### 4.1.1 Legal Construction of Claims Management Companies

Currently there are even two different types of service providers in form of private enterprises who offer to enforce air passengers' entitlements towards the airline: Those which let assign the claim from the customer and pay an amount of round about 50% of the predicted compensation at once (e.g. Wir kaufen Deinen Flug, Flightcash, FairPlane Express,...etc.). And those companies which assert the claims on behalf of the affected passengers. The first type is the younger model whereas the paper focusses on the second type, the common model which is much more popular up to now.

In order to claim against the airline the passenger has to give his mandate to the claims management company. If the claims management company is not successful against the airline and has to file a lawsuit a lawyer is still needed. Usually the claims management companies cooperate with lawyers but nevertheless the air passenger also has to get into a contract with the lawyer. As lawyers in general are not allowed to work on the basis of contingency fees, it is the claims management company which overtakes the costs for the lawyers and the court. With the help of this legal construction they charge fees in case of success of 25–30% plus VAT of the paid compensation without getting in conflict with the prohibition of contingency fees for lawyers. Thus the customer does not have to pay any fees in advance and moreover does not risk paying the whole fees for the trail in case of losing the trial.

#### 4.1.2 Scope of Application and Requirement to Offer Services

The claims management companies specialized on cases of cancellation, overbooking and long delays of flights in which the Air Passenger Regulation (EC) No 261/2004 applies. Moreover they reduced their business to claims of compensation pursuant Art. 7 of the Regulation which means the lump-sums whose heights depend on the flight distance. Before they enter into a contract they calculate the predicted success rate. Therefore they maintain huge databases with data about cancellations, delays, overbookings and the outcomes of other claims. Within a few minutes they are able to calculate whether the case has high prospects of success. This method is currently also discussed in other fields related to legal services under the buzzword "Legal—Tech" (Scherer 2016). In general claims management companies only enter into a contract with the client if the success rate is high enough. This precondition explains how they achieve such high success rates of more than 90% (e.g. EUclaim, n.d.).

#### 4.1.3 What Makes Claims Management Companies So Attractive?

On the one hand there are many cases in which passengers suffered from flight cancellations, long delays and overbooking and the trend is even worse (Kowalewski 2017). On the other hand claims management companies inform passengers about their rights and the procedure itself is very easy to handle. Passengers can give in their data on the website and check whether the claims management company is willing to overtake the case due to an expected success rate that must be high enough concerning their databases. Thus they reduce the lack of information among passengers, reduce the inhibition threshold of customers and take off the financial risk. Concerning the financial risk there is a psychological explanation why customers do not mind to pay the contingency fees, that is to say they do not feel a lost, just a gain (Rott 2016). When passengers receive the compensation minus the fee and VAT (e.g. Flightrigt, n.d.), it still feels for them like a gain, because they did not expect the money. According to the legal idea of the regulation the compensation pursuant Art. 7 represents an indemnification for a loss of time and trouble the passengers had but what the real damage was stays an individual experience. In many cases passengers do not feel a damage that can be assessed in an amount of money. For many passengers the fact that the airline is hold to be accountable after they did not handle the passenger's rights in a correct manner is more satisfactory than the money itself. These are the reasons why passengers feel attracted to their services and do not mind paying a contingency fee in case of success.

# 4.2 Conciliation Bodies: The Conciliation Body for Public Transport in Germany

In the European Member States there are different types of conciliation bodies which deal with passenger rights (Schiefelbusch 2009). Most recently their development was promoted by the implementation of the Directive 2013/11/EU for alternative dispute resolution of consumer disputes (European Parliament and Council of Europe 2013b). As conciliation procedures differ from each other especially due to various national contexts (Hodges et al. 2012) the Conciliation Body of Public Transport in Germany serves as an exemplary model in this examination. The German legislator had already decided to require that airlines had to take part in a special conciliation procedure concerning § 57a LuftVerkehrsgesetz (LuftVG) before the above mentioned ADR Directive had to be implemented. Therefore a new law on ADR in aviation sector (Gesetz zur Schlichtung im Luftverkehr) came into force on 1st of November 2013 in Germany. Thus the German legislator took as well measures against the lack of enforcement in the field of air passenger rights (Bundesamt für Justiz, n.d.).

# 4.2.1 Legal Construction of the Conciliation Body for Public Transport in Germany and Its Conciliation Procedure

Initially in 2009 the söp was founded as an independent arbitration service in the field of train travels. In the meantime its competencies include as well travel by bus, ship and—since November 2013—by plane (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2017a). The aim of the söp is to conciliate consumer complaints amicable and out of court (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2014). It is a private non-profit institution in form of a registered association. For the consumers the service is free of charge. The costs are borne by the transport companies. That is to say in the field of aviation matters by those airlines which are members of the söp (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2017b). According to German legislation the airlines are free to choose which ADR institution is responsible for them. They are even free to establish one on their own. If they do not become member of a private ADR institution the procedure has to take place before the public conciliation body which is organized within the Ministry of Justice (Bundesamt für Justiz, n.d.). During the last 3 years most airlines operating in Germany have become a member of the söp.

The Airlines are legally obliged to take part in the conciliation procedure until its end but they are not bound to the final conciliation recommendation (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2014). In contrast the passenger is always free to quit the procedure at any time. Thereby the procedure stands for voluntariness on both sides. That is to say by the end of the procedure the conciliator sends a report and a conciliation recommendation which is based on the

current legal basis to both sides and both parties are obliged to let to know the söp whether they accept the recommendation or not. If both parties agree they enter into a contract according to the conciliator's recommendation and the procedure is successfully concluded. If one party does not agree, the procedure is also concluded and it is up to the parties how to end the conflict, e.g. by filing a lawsuit. The limitation period to bring the case before court is suspended during the conciliation procedure pursuant § 11 of the rules of procedure (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2014).

#### 4.2.2 Scope of Application and Requirements for Its Work

In aviation sector the scope of application is limited to cases with a dispute amount of maximum 5000 Euro. In contrast to the claims management companies the söp deals with all cases to which the Air Passenger Regulation (EC) No 261/2004 applies and furthermore it also deals with the common cases of lost and delayed luggage. Due to the fact that the legal framework requires the opportunity of ADR procedure only for consumers concerning German civil law ("Verbraucher" according to § 13 Bürgerliches Gesetzbuch (BGB)), legal entities cannot join the procedure. This means that by the personal scope, claims based on business trips are excluded in general. The most important requirement for the conciliation procedure consists in the obligation that, at first, the affected passenger has to give in his/her complaint to the airline which then has 2 months to give an answer to the passenger (compare Art. 57b paragraph 2 No. 5 LuftVG). Only if the airline does not answer or the passenger is not satisfied with the result, the services of the söp are accessible. The following procedure is very easy to handle and mostly done by internet with the help of online forms.

#### 4.2.3 Reasons for Its Successful Development and High Acceptance Rate

The söp offers its services without any fees for the consumer. All costs are borne by the airlines which are member of the söp. The air carriers pay an annual membership fee and a fee for every case which is examined by the conciliator. If the airline acknowledges the claim of the customer immediately just after it was given in and before the söp started to examine the case, it stays even free of charge for this case. This policy offers incentives which make the söp procedure attractive for both sides. For the airlines it can be seen as a kind of external customer relation management because it offers (most probably the last) opportunity to retrieve the relation with its customer by ending the conflict with an amicable solution. The söp informs the air passengers very well about their rights and the claimant even gets a report about his/her case, so that he/she can understand his/her individual legal situation. The average duration of the process is only 4–6 weeks (Berlin 2014). Due to the voluntariness of the procedure both parties still have the chance to prefer another route of enforcement. The conciliators are highly educated they are all fully qualified

lawyers. With its wide scope of application it offers a route of enforcement for many cases in which air passengers are involved as consumers and where they find themselves in a weaker position due to less legal knowledge and less information. The söp accepts all cases independently of their expected prospects of success. Essential for their success is not the rate of compensation but the number accepted conciliation recommendations (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2017c).

# 4.3 Comparison Between Claims Management Companies and the Conciliation Body for Public Transport in Germany

Comparing the route of enforcement which is offered by the Conciliation Body for Public Transport in Germany and the one which is offered by the claims management companies, many significant differences and only a few similarities are figured out, which are shortly summarized in the following paragraphs:

The scope of application of the claims management companies is limited to cases, in which the passenger claims for compensation in form of a lump-sum according to Art. 7 of the Air Passenger Regulation (EC) No 261/2004. Furthermore, only if the case fulfills a certain expected success rate which is calculated with the help of the company's database it undertakes the claim in general. The scope of the conciliation body of Public Transport in Germany seems on the first sight much wider because it deals with all claims in which the Air Passenger Regulation applies plus cases of delayed and lost luggage but it is limited concerning its personal scope only to claims of consumers and cases towards airlines which are member of the söp.

Both procedures are easily accessible and most paperwork can be done by internet. For the affected passenger the effort for the procedure of the conciliation body is higher due to the fact that the passenger needs to complain at the airline first. Probably this raises the inhibition level of the söp procedure in contrast to the services of the claims management companies which start their procedure directly with claiming against the airline on behalf of the client.

The length of procedure of the söp is extremely short. It may take maximal 3 months (Schlichtungsstelle für den öffentlichen Personenverkehr (söp) 2014). Whereas 2 further months could be needed for the complaint which the passenger has to allege directly to the airline in advance. The duration of the procedure of the claims management companies is not predictable; it depends on whether the case is brought before court. Hence, it takes between several weeks and up to several years.

The passenger does not have to pay any costs for the procedure before the söp. All costs are beared by the airline. For the services of the claims management companies the passenger has to pay in case of success, that is to say a contingency fee of round about 25% plus VAT (e.g. Flightrigt, n.d).

#### 5 Conclusion

As a result of the analysis and the comparison and as an answer to the question which route of enforcement is most beneficial for the affected passenger, it has to be noted that it depends on the case and as well on the individual preferences of the claimant.

Cases of rational inactivity and in which the passenger is not informed about his/her rights will still not be enforced. But both, conciliation bodies and claims management companies, help with their advertisement, websites and their public relation management to inform consumers about their rights and to give them incentives in order to reduce their inhibition threshold of enforcing their rights. Those consumers who dislike any efforts and are even unwilling to complain towards the airline will probably prefer the services of a claims management company. But as a requirement their case must fit into the clearly defined scope and it must have a sufficient success rate that is expected with the help of the database of the claims management companies. As a disadvantage the consumer risks to pay the contingency fee (which most probably does not feel negative for him/her). If the case is rejected by the claims management companies, it does not necessarily mean that nevertheless, it can be successful if the consumer choses another route of enforcement.

From the consumer perspective, arguments for the söp procedure can be seen in its wider scope of application, the high acceptance rate and the fact that the admission to the procedure does not depend on a predicted success rate. There are no costs for the claimant and the procedure takes a very short time. If the consumer is not satisfied with the services of the söp, he/she can stop the procedure at any time and still decide for another route of enforcement, e.g. lawyer or claims management company (as long as there is no conciliation agreement signed). Finally it is also a question of individual preferences which route of enforcement the consumer choses. The aim of the claims management companies is to achieve a high amount of compensation, whereas the intention of the conciliation bodies is to find an amicable solution between the airline and the affected passenger based on the current legal framework. An advantage of the claims management companies consists in their huge databases they maintain. Thus the claims management companies possess a significant edge in knowledge and information which the söp has not yet been able to establish. The databases help them to claim for the maximum amount of compensation against the airline what is necessary for them as a private company because they have to work in a cost efficient way and therefore have to filter out the cases with an expected low success rate. On the other hand this can be a disadvantage for those consumers which suffered from such a "filtered out case". They are probably not aware of the fact that they can still claim successfully against the airline but therefore need to choose another route of enforcement (e.g. Lawyer, söp).

Finally the claims management companies which started their business nearly 10 years ago contributed a lot to the jurisdiction of the ECJ and thus as well to the interpretation of the regulation. Many of the cases which were submitted to the ECJ

by national courts were initiated by claims management companies. Still they bring cases having a precedent character before court. With its larger scope of application one could say that the söp supplements the work of the claims management companies and in some cases it can even get in competition with the claims management companies but all in all unfortunately there are still too many cases that they seriously have to compete with each other.

#### References

- Augenhofer, S. (2012). Some questions on enforcement and individual redress The example of Regulation (EC) No 261/2004. In R. Greimer, R. Schütze, & T. Garber (Eds.), Europäische und internationale Dimensionen des Rechts, Festschrift für Daphne-Ariane Simotta [European and International Dimension of Law, Festschrift for Daphne-Ariane Simotta] (pp. 39–56). Vienna: LexisNexis.
- Berlin, C. (2014). Alternative Streitbeilegung in Verbraucherkonflikten [Alternative Dispute Resolution in Consumer Conflicts]. *ReiseRecht aktuell*, *5*, 210–215.
- Bollweg, H.-G. (2013). Alternative dispute resolution (ADR) in the aviation sector in Germany. *German Journal of Air and Space Law*, 3, 398–409.
- Bundesamt für Justiz [Federal Office of Justice]. (n.d.). Schlichtungsstelle Luftverkehr [Arbitration Board for Air Traffic]. [online] Accessed August 15, 2017, from https://www.bundesjustizamt.de/DE/Themen/Buergerdienste/Luftverkehr/Schlichtungsstelle\_node.html
- Cortés, P. (2016). Enforcing EU consumer policy more effectively: A three-pronged approach. In S. Drake & M. Smith (Eds.), *New directions in the effective enforcement of EU Law and Policy* (pp. 202–230). Cheltenham: Edward Elgar.
- Damania, R., & Round, D. (2000). The economics of consumer protection: Introduction. Australian Economic Papers, 39(9), 403–407.
- Decker, C. (2017). Concepts of consumer in competition, regulatory, and consumer protection policies. *Journal of Competition Law & Economics*, 13, 151–184.
- EUclaim. (n.d.). *Problems with your Flight?* [online] Accessed August 15, 2017, from https://www.euclaim.co.uk/
- European Court of Justice [EU-Decisions]. (2009). Sturgeon v Condor Flugdienst GmbH (C-402/07). [online] Accessed August 15, 2017, from https://eur-lex.europa.eu/legal-content/EN/TXT/? qid=1528460175108&uri=CELEX:62007CJ0402 and as another example in 2009: Böck, Lepuschitz v Air France SA (C-432/07). [online] Accessed August 15, 2017, from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62007CJ0402
- European Parliament and Council. (2004). Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91. [online] Accessed August 15, 2017, from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\_.2004.046.01.0001.01. ENG&toc=OJ:L:2004:046:TOC
- European Parliament and Council. (2013a). Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EC) No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights and Regulation (EC) No 2027/97 on air carrier liability in respect of the carriage of passengers and their baggage by air, COM/2013/0130 final 2013/0072 (COD). [online] Accessed August 15, 2017, from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52013PC0130

- European Parliament and Council. (2013b). Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Directive on consumer ADR). [online] Accessed August 15, 2017, from https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1484606267841&uri=CELEX:32013L0011
- Finanztip. (2017). Mehr als ein Drittel der Deutschen kennt seine Rechte als Fluggast nicht [More than one third of the Germans do not know their rights as air passenger]. [online] Accessed August 15, 2017, from http://www.presseportal.de/pm/112681/3686120
- Flightright. (n.d.). Our costs Clear and transparent. [online] Accessed August 15, 2017, from https://www.flightright.co.uk/costs?\_ga=2.12883767.1696596287.1528459070-1651412764. 1528459070
- Geier, A. (2016). Zivilrechtliche Durchsetzung der Fluggastrechte eine Belastung für Fluggesellschaften und Verbraucher [Enforcement of air passenger rights under Civil Law A Burdon for airlines and consumers]. *European Journal of Business Law, EuZW, 773–778*.
- Hodges, C., Benöhr, I., & Creutzfeldt-Banda, N. (2012). Consumer ADR in Europe. Oxford: HART.
- Kowalewski, R. (2017). Flugverspätungen nehmen zu [Delays in air traffic increase]. *RP Online*. [e-journal] Accessed August 15, 2017, from http://www.rp-online.de/wirtschaft/flugverspaetungen-nehmen-zu-aid-1.6852002
- Rott, P. (2016). Claims management services: An alternative to ADR? *European Review of Private Law*, 24, 143–159.
- Scherer, K. (2016). Automatisch recht bekommen [Winning the case automatically]. Zeit Online [e-journal] Accessed August 15, 2017, from <a href="http://www.zeit.de/2016/40/legal-tech-algorithmen-juristen-ersatz">http://www.zeit.de/2016/40/legal-tech-algorithmen-juristen-ersatz</a>
- Schiefelbusch, M. (2009). Neutral alternative dispute settlement Concepts for Ombudspersons and Arbitration Boards. In M. Schiefelbusch & H. L. Dienel (Eds.), *Public transport and its users* (pp. 53–70). New York: Routledge.
- Schlichtungsstelle für den öffentlichen Personenverkehr (söp) [Conciliation Body for Public Transport in Germany]. (2014). *Verfahrensordnung* [rules of procedure]. [pdf] Accessed August 15, 2017, from https://soep-online.de/assets/files/Verfahrensordnung/soep-Verfahrensordnung. pdf
- Schlichtungsstelle für den öffentlichen Personenverkehr (söp) [Conciliation Body for Public Transport in Germany]. (2017a). Welcome to söp the German Conciliation Body for Public Transport. [online] Accessed August 15, 2017, from https://soep-online.de/welcome.html
- Schlichtungsstelle für den öffentlichen Personenverkehr (söp) [Conciliation Body for Public Transport in Germany] (2017b). *Mitglieder des Trägervereins* [Members of the Association]. [pdf] Accessed August 15, 2017, from https://soep-online.de/assets/files/31.07.sop\_Mitgliederliste.pdf
- Schlichtungsstelle für den öffentlichen Personenverkehr (söp) [Conciliation Body for Public Transport in Germany]. (2017c). *Jahresbericht 2016* [Annual Report]. [pdf] Accessed August 15, 2017, from https://soep-online.de/assets/files/Marz\_sop\_Jahresbericht-2016.pdf
- Steer Davies Gleave (SDG). (2010). Evaluation of Regulation 261/2004, Final Report. [pdf] Accessed August 15, 2017, from http://ec.europa.eu/transport/sites/transport/files/themes/passengers/studies/doc/2010\_02\_evaluation\_of\_regulation\_2612004.pdf
- Steer Davies Gleave (SDG). (2012). Exploratory study on the application and possible revision of Regulation 261/2004, Final Report. [pdf] Accessed August 15, 2017, from http://ec.europa.eu/transport/sites/transport/files/themes/passengers/studies/doc/2012-07-exploratory-study-on-the-application-and-possible-revision-of-regulation-261-2004.pdf
- Your Europe. (2017). Rail passenger rights. [online] Accessed August 15, 2017, from https://europa.eu/youreurope/citizens/travel/passenger-rights/rail/index\_en.htm

## Airports as Shopfronts of Tourism Destinations: Awarded Brand Singapore Changi Versus Surviving Istanbul Ataturk



Erkan Sezgin and Gül Nur Demiral

**Abstract** Industrial tourism which is depended on inclusive tours consists of several supplying sectors. Air transportation is one of the primary suppliers of industrial tourism not only because it provides one of the two main components of inclusive tour but also it is maybe the most institutional and industrial supplying sector for tourism. Airports on the other hand, play a shopfront role for the destinations as they are 'first impressions' either for the arrival-departures or for the transfers. Considering the importance of airports as shopfronts, the main international Airport in Turkey: Istanbul, Ataturk (IA) is examined in this particular study. Taking the perceptions of both airports' passengers into consideration, the well-known and permanent five star rated Singapore, Changi (SC) as 'best in class' (BIC) is compared with three star rated IA. The results revealed there are significant differences between the perceptions of both airports' passengers.

**Keywords** Tourism · Airports · Ataturk Airport · Changi Airport · Benchmark

#### 1 Introduction

Air transport plays an important role in tourism (Bows et al. 2009). It, in particular, is a type of transportation that improves the long-distance travel facility. According to Rodrigue et al. (2017), air transport is the main form for international tourism, provides easy access to destinations and thus plays an important role in the development of tourism worldwide. UNWTO (2016) reports that 54% of tourist travelled to their destination by air and this demand for air travel is growing rapidly (Leung et al. 2017). Demand by tourists to arrive at a destination leads to enhanced air service and increased air links allow tourists to more readily access a destination. Destinations at all times endeavor to build competitive and magnificent airports equipped with brand new technologies which will be able to overcome the burdens

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of peak times and compete in the industry where tough competition exists (Mammadov 2012). On short-haul voyages passengers may spend more time at the airport than they are in the air and when they arrive at the destination, the airport promotes to their first impression of a destination (Wiltshire 2018). In consideration of the above, it is possible to claim that airports are the first doors to the destination to open by the tourist (Mammadov 2012).

Since the number of passengers is increasing, the roles which airports have been playing are strongly consolidated by covering non-aviation services such as restaurants, shops, cafes, and entertainment (Lu 2014; Tovar and Martin-Cejas 2009). Moon et al. (2017) suggest that four variables of airport physical surroundings, facility aesthetics, layout accessibility, seating comfort, and cleanliness, are the main determinants of customer satisfaction. On the other hand, facilities are just on safe the components and they cannot provide the success without the other components.

The airports should employ various marketing techniques to survive and to stay competitive in the market. One of these—and may be the most famous one—is benchmarking method. There are various studies in the literature about airport benchmarking (Francis et al. 2002; Yoshida 2004; Graham 2005; von Hirschhausen and Cullmann 2005; Tsamboulas and Tatsi 2007; Gillen 2008; Kincaid and Tretheway 2009; Dmitry 2012; Babu 2014; Chung et al. 2015; Guiomard 2016; Cahill et al. 2017; Selvan et al. 2017). According to these studies, airport benchmarking is essential topic for tourism industry.

Another important strategy that needs to be implemented by airport professionals is branding. Paternoster (2008), Tse (2009), Chung et al. (2013), Kamarudin (2014), Castro and Lohmann (2014), Lee and Park (2016), Pawłusz and Polese (2017), Chua et al. (2017) show that branding is also very important issue in airport industry.

Considering the importance of airports as shopfronts, the main international Airport in Turkey: Istanbul, Ataturk (IA) airport's performance is going to be examined in this particular study. For this purpose, airline and airport star rating forum Skytrax's (Skytrax 2017a) data about passengers' perceptions will be used in the study. The well-known and permanent five star rated Singapore, Changi (SC) airport as 'best in class' (BIC) is going to be compared with three star rated IA in order to identify the insufficiencies of IA airport.

#### 2 Theoretical Framework

In the literature, the studies mainly focus on the relationship between air transportation and tourism (Wheeller 1991; Turton and Mutambirwa 1996; Lumsdon 2000; Jenkins 2015; Tsui 2017), airports as destinations (Martín-Cejas 2006; Mammadov 2012; Wiltshire 2018) and marketing of airports (Pels et al. 2003; Jarach 2016) as mentioned in the following sections.

#### 2.1 Air Transportation and Tourism

Air transport and tourism are operationally interlinked (Bieger and Wittmer 2006). They promote 'demand and cost' complementariness and support the holistic production of a tourism experience (Papatheodorou 2002). Air travel is naturally related to tourism mainly in terms of international flows, but also for domestic movements in larger countries (Papatheodorou and Lei 2006). The air transportation system has found out new destinations and it has formed new tourism forms, such as long distances trips (Bieger and Wittmer 2006). In addition to these aviation influence the economic development of a country and plays a vital role in supporting tourism (Beifert 2016).

Graham (1996) stated that the demand for air transport is a derived demand depending ultimately on the demand for the overall tourism product. The importance of air travel on tourism demand has been discussed by many researchers (Wheeller 1991; Turton and Mutambirwa 1996; Lumsdon 2000; Prideaux 2000; Becken 2002; ETC 2006, 2007, 2008; Jenkins 2015; Tsui 2017). There are also few studies of the economic impacts of air transportation on tourism (Holloway and Taylor 2006). The presence of an airport in a destination provides both an economic contribution to the region and allows tourists to be attracted to that destination. Button and Taylor (2000) demonstrated that availability of international air services has a positive influence on the economic structures of destinations. Baker et al. (2015) investigated 88 regional airports to determine relation between regional airports and economic growth and found that causal relationship causalities between them. The effects of the airports on regional economic growth have also been studied by Rietveld and Bruinsma (1998), Hart and Mccann (2000), Hakfoort et al. (2001), Brueckner (2003), Percoco (2010), and Button and Yuan (2013). Khan et al. (2017) concluded that availability of air transportation has a positive effect on the incoming tourism index. Finally, Olipra (2012) determined that low-cost airlines can positively affect less famous destinations and can help them to promote and increase the number of tourists.

### 2.2 Airports as Destinations

Airports are the areas where passengers have first impressions and perceptions about the destination. According to Martín-Cejas (2006), airports are the first point of contact for passengers when they arrive at the destination. Therefore, airport resources give passengers the first impression about the destinations (Mammadov 2012; Wiltshire 2018) and represent the quality of destinations' life. Consequently airports should create a positive image in the minds of passengers about the quality of destination. Airports should also provide the essential facilities for the passengers. The facilities that can help the success of the airports could be as follows:

- Minimum queuing times,
- · Terminal cleanliness.
- · Adequate terminal seating,
- · Terminal signs,
- · Food & beverages,
- · Airport shopping,
- Wi-Fi connectivity,
- Qualified airport staff.

Singapore Changi International Airport has been awarded the world's best airport for five consecutive years (including 2017) by Skytrax World Airport Awards. The main reason for sustainable award is probably the consideration of the facilities listed above. Skytrax is a worldwide benchmark of airport perfection and commonly known as the Passengers Choice Awards (Skytrax 2017b). The other services and facilities that provide the success for Singapore Changi Airport could be airline lounges, internet connection, convenience stores, money changers, transit hotels, passenger meeting services, information and customer service counters, free-to-use rest areas, ground transport concierge, clinics and pharmacies (Changi Airport 2017).

#### 2.3 Airport Marketing

Airport marketing has been defined as "fundamental step for establishing new -rules of conduct- and later implementing them in a consistent way" (Jarach 2016). Airports may have to compete with other airports (Pels et al. 2003) to gain a place in the market, attract more passengers, provide quality services etc. Benchmarking is one of the techniques used by airports. Benchmarking could be used to compare the performance of one particular company or among different companies in an industry (Chen 2002). In other words benchmarking is the process of determining best practices, understanding their meaning in relation to business, and adapting these practices to help companies improve their performances (Air Cargo Guide 2013).

While benchmarking focused on manufacturing processes in the past, it has been used presently in product development, marketing, sales, customer satisfaction and in the public and private sector and non-profit organizations (IATA 2010). Benchmarking has been used in various ways (assess managerial or firm performance, collaborative benchmarking, price regulation, national policy and supply chain or value chain efficiency) (Kincaid and Tretheway 2009). On the other hand Tsamboulas and Tatsi (2007) mentioned that there are three types of benchmarking for the airport industry: Infrastructure performance, asset performance and service-level performance.

Gillen (2008) claimed that decisions makers can employ the power of benchmarking for operational decisions and long term strategic planning due to airport benchmarking can provide management with comprehensive data and a consistent analytical methodology. Von Hirschhausen and Cullmann (2005) found out a review of methodologies used for airports benchmarking. They have classified these methodologies as partial approaches and multi-dimensional approaches.

Brand is another important issue in airport marketing. Airport branding is defined as "what customers and other stakeholders think about the airport and the services and products provided" or "the sum total of all the customer experiences at an airport, as perceived by the customer" (Paternoster 2008, p. 220). According to Marketing Science Institute the airport brand refers to "airport brand as a degree of influence of airlines and passengers on the selection of a specific airport and contribution of profits followed by it which also suggested that a particular airport brand can bring high reputable business value in term of future earnings" (Ismail and Berhad 2014, p. 4). Airport branding strategies should consist of the following components: The selection of food and beverage providers; the selection of retail stores; pricing strategies; the architectural design; airport artwork; services, entertainment, and amenities; service staff; logos and slogans (Tse 2009, p. 122).

The airports which are accepted as the most successful across the world usually the ones that successfully adopted the strategic brand category. Airport's logos, slogans and advertisements should represent the brand whereas they don't necessarily represent the brand of airport (Paternoster 2008; Kamarudin 2014). SC Airport, for example, is recognized to its outstanding strategic airport brand. The management of the airport realize that strength and the value of brand. Thereby, all the things they do are related to the brand (Kamarudin 2014). Brand of the airports may also contribute to branding of destinations. For instance, SC's passenger experience, which it's won nearly 500 awards for, helped establish the entire Singapore brand, not just that of the airport (Skift 2016).

Name of airports' is another important factor about branding. Airports are named after the city (e.g., Istanbul Ataturk Airport), town or village, region, country, city-state or special administrative region (e.g., Singapore Changi Airport) and tourist destination (Halpern and Regmi 2011). In summary, slogans have significant effect on branding. It can help constitute the image and identity of a product or service (Lee and So 2007). IA Airport, for example, served 32.1 million passengers in 2010, making it among one of the busiest airports in the world. The airport's 300+ nonstop destination offering added to its convenient location in the city proves it slogan of "Prime Location, Global Gateway" (Istanbul, IAIA). The slogan is "Enjoy the Experience" is used by Singapore Changi Airport.

### 3 Methodology

Skytrax is a foundation which scores airlines and airports from one star to five stars by collecting consumer evaluations about airlines, airports, airport lounges, cabin services and caterings (Sezgin and Yuncu 2016). The Skytrax brand is recognized and associated with quality excellence throughout the world by the air transport industry, and Skytrax has become well known among the traveling public with the

Table 1	Descriptive	profiles
of respon	dents	

N = 184	n	f (%)
Type of travel		
Arrival-Departure (IA)	44	23.9
Transit (IA)	51	27.7
Arrival-Departure (SC)	58	31.5
Transit (SC)	31	16.8
Type of traveler		
Solo leisure	62	33.7
Couple leisure	38	20.7
Family leisure	51	27.7
Business	33	17.9

airline star rating, World Airline Awards and World Airport Awards (Skytrax 2017a). The foundation declares that there is no relation or integration with any other companies including airlines, hence the foundation is completely independent. The independence of Skytrax may be the most important characteristic which makes the system prestigious in the airline industry. However, the transparency and accuracy of the data announced by its official website (Skytrax 2017a) is another important characteristic which distinguishes the foundation from other evaluators.

İstanbul Atatürk (IA) and Singapore Changi (SC) Airports' evaluation questionnaires announced by "airlinequality.com" of Skytrax were used in this particular study. The data transferred from Skytrax's website (Skytrax 2017a) was processed using the Statistical Package for Social Science (SPSS) version 22.0.

#### 3.1 Sample

The subjects of the present study are IA and SC airports which are presumed as "hub airports" in the air transportation literature. The sample of the study are 184 (95:IA and 89:SC) arrival/departure and transit (passengers used airports for transfer will be named as transit in the study) passengers who participated the Skytrax questionnaire during 2015 June and 2017 April. Descriptive profiles of all passengers were demonstrated in Table 1. The visitors of both airports represent 38 different countries who are mainly from United Kingdom (UK) (21.7%), United States of America (USA) (13.6%) Singapore (12%) and Australia (9.8%). As can be seen from the table, IA is more transit airport (27.7%), while SC is used more by arrival/departure (31.5%). On the other hand, 'solo leisure' has the majority with 33.7% when types of travelers are considered.

### 3.2 Measurement and Data Analysis

The questionnaires announced on 'airlinequality.com' website of Skytrax were used in the present study. Apart from the demographic questions, the respondents were asked to answer 8 five-point scale questions (queuing times, terminal cleanliness, terminal seating capacity, terminal signs, food and beverages, airport shopping, Wi-Fi connection and airport staff) ranging from 1 (least satisfied) to 5 (most satisfied) in order to indicate their evaluations about the airport services.

Table 2 demonstrates descriptive statistics of the data. Cronbach's  $\alpha$  coefficients of all eight items are found highly reliable (0.94) (Hair et al. 1995). The rest of the variables demonstrated in the Table 2 are related with normality. Kolmogorov-Smirnov's normality test is recommended for larger samples (>300) whereas Shapiro-Wilk is recommended for smaller samples (Wuensch 2016). The assumption of normality in the observations ( $\rho > .05$ ) with Levene's test were met for the data of the study. Box's test of equality of covariance matrices ( $\rho = 0.083$ ) also considered acceptable. Among others, tests of the significance of skewness and kurtosis are not considered appropriate with large samples, as very small standard errors will always produce significant results (Linley et al. 2009). According to Tabachnick and Fidell (2011), the skewness and kurtosis values between -1.5 and +1.5 are considered acceptable in order to prove normal univariate distribution. That said, as shown in Table 2, the values of skewness and kurtosis still fall within the acceptable range of -1.5 to 1.5. Hence, the data is accepted appropriate for parametric tests in the present study.

### 4 Findings

Airport services perceptions of arrival-departure and transit passengers who visited IA and SC and the relations of the perceptions have been examined in the present study. Table 3 demonstrates the relations of transit passengers' perceptions on both SC and IA airports. Results reveal that there are significance on all eight items. Truthfully, these results are not surprising since SC is a permanent five-star airport and IA is a surviving three-star rated. Though, mean scores of each airport would give a latent evidence for such benchmarking. When the distances of the items' mean ranks are considered on both perceptions, 'food & beverages' is the closest (IA:2.41, SC:3.61) one while 'queuing times' is the furthest (IA:1.75, SC:4.26). Lowest mean score of SC's transit passengers is '3.52' (Wi-Fi connection) and lowest score of IA's transit passengers' is '1.73' (terminal seating capacity). As can be seen from Table 1, IA is more transit airport (hub airport) and 'seating' is essential for such airports. However, the airport capacity is inadequate and terminal extension is no more possible since the airport is in the city center now. On the other hand, both airports have the highest mean scores from 'airport shopping' (IA:2.69, SC:4.52) because both countries (Turkey and Singapore) are cheap and popular for shopping.

 Table 2
 Descriptive statistics including Skewness and Kurtosis

		Terminal	Terminal		Food and			
	Queuing times	cleanliness	seating capacity	seating capacity   Terminal signs	beverages	Airport shopping   Wifi connect	Wifi connect	Airport staff
Cronbach's α	0.94							
Test of Normality $\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$
(Shapiro-Wilk)								
Box's test of	Box's M = 142.512	2						
equality of	F = 1.194							
covariance	$\rho = 0.083$							
matrices								
Levene's test	F = 0.760	F = 0.794	F = 1.283	F = 2.086	F = 0.748	F = 0.162	F = 0.883	F = 1.790
	$\rho = 0.518$	ho = 0.499	ho=0.282	$\rho = 0.104$	$\rho=0.525$	$\rho = 0.922$	$\rho = 0.451$	$\rho = 0.151$
Skewness	Skew. $= 0.034$	Skew. $= -0.483$	Skew. $= 0.086$	Skew. $= -0.318$	Skew. $=-0.140$	Skew. = $-0.522$	Skew. $= 0.140$	Skew. $= 0.046$
	St.Err. = $0.179$	St.Err. = $0.179$	St.Err. = $0.179$	St.Err. = 0.179	St.Err. = 0.179	St.Err. = 0.179	St.Err. = 0.179	St.Err. = 0.179
Kurtosis	Kurt. $= -0.1477$	Kurt. = $-0.1477$ Kurt. = $-1.269$ Kurt. = $-1.271$ Kurt. = $-1.185$	Kurt. $= -1.271$	Kurt. = $-1.185$	Kurt. = $-0.995$ Kurt. = $-0.840$ Kurt. = $-1.128$ Kurt. = $-1.423$	Kurt. = $-0.840$	Kurt. $= -1.128$	Kurt. $= -1.423$
	St.Err. = $0.356$	= 0.356 St.Err. $= 0.356$ St.Err. $= 0.356$ St.Err. $= 0.356$	St.Err. = 0.356	St.Err. = 0.356	St.Err. = 0.356	St.Err. = 0.356	St.Err. = 0.356 $St.Err. = 0.356$	St.Err. = 0.356

=			_	_		=
	Respondent	Mean	Standard deviation	t	Degrees of freedom	Significance
Queuing times	IA SC	1.75 4.26	0.935 1.365	-9.888	80	0.000
Terminal cleanliness	IA SC	2.12 4.48	1.160 1.180	-8.900	80	0.000
Terminal seating capacity	IA SC	1.73 3.77	0.850 0.920	-10.254	80	0.000
Terminal signs	IA SC	2.33 3.81	1.108 1.014	-6.026	80	0.000
Food and beverages	IA SC	2.41 3.61	1.080 0.989	-5.037	80	0.000
Airport shopping	IA SC	2.69 4.52	1.140 0.926	-7.545	80	0.000
Wifi connection	IA SC	1.78 3.52	0.929 0.811	-8.672	80	0.000
Airport staff	IA SC	1.82 3.55	1.014 0.925	-7.715	80	0.000

**Table 3** Independent t Test results of IA and SC airports transit passengers' perceptions

**Table 4** Independent t Test results of IA and SC airports arrival-departure passengers' perceptions

	Respondent	Mean	Standard deviation	t	Degrees of freedom	Significance
Queuing times	IA SC	1.82 4.19	1.105 1.277	-9.835	100	0.000
Terminal cleanliness	IA SC	2.64 4.76	1.143 0.506	-12.616	100	0.000
Terminal seating capacity	IA SC	2.16 4.33	0.939 0.925	-11.652	100	0.000
Terminal signs	IA SC	2.77 4.74	1.217 0.609	-10.690	100	0.000
Food and beverages	IA SC	2.50 4.34	1.000 0.947	-9.512	100	0.000
Airport shopping	IA SC	2.82 4.34	1.187 0.983	-7.101	100	0.000
Wifi connection	IA SC	1.84 3.95	1.033 1.099	-9.841	100	0.000
Airport staff	IA SC	2.14 4.17	1.305 1.230	-8.065	100	0.000

Independent t Test results of arrival/departure passengers' of SC and IA airports are shown in Table 4. Results also reveal for arrival/departure passengers that there are significance on all eight items. Mean score distances of both airports' arrival/departure passengers' perceptions are even further that even the closest item 'airport shopping (IA:2.82, SC:4.34) has more than 1.5 point difference. On the other hand 'queuing times' item also has the highest difference for arrival/departures (IA:1.82, SC:4.19). Naturally, the lowest mean score of IA's arrival/departure passengers is

'1.82' with 'queuing times' while lowest score of SC's arrival/departure passengers' is '3.95' (Wi-Fi connection). Lowest mean scores on 'queuing times' and 'terminael seating capacity' is inevitable for smaller but busier IA airport when passenger movements of both airports are considered (IA: 60.1 million in 2016 and SC:58.7 million in 2016). IA airport gets the highest mean score from 'airport shopping' item again (IA: 2.82) while SC's highest mean score is 4.76 (terminal cleanliness).

#### 5 Conclusions

Tourism is more associated with marketing and promoting nowadays. On one side, there are 'open museum' cities which are not successfully marketed (e.g. Rome, not in top ten destinations) on the other side, there are also 'artificial destination' cities (e.g. Dubai seventh in top ten destinations) promoted highly effective. The main contribution of the present study lies in its identifying airports as 'shopfronts' for tourism. Accordingly, this study specifically analyses: (1) the performance of IA airport considering Skytrax evaluations (2) whether there are insufficiencies when comparing to a successful permanent five star airport; SC.

### 5.1 Implications for Theory

The present study has some certain contributions to the tourism literature. There have been previous studies focusing on the airports and airport marketing in the literature and some of which included airport benchmarking (Chen 2002; Pels et al. 2003; von Hirschhausen and Cullmann 2005; Tsamboulas and Tatsi 2007; Gillen 2008; Jarach 2016). However, this particular study differentiates from them with its method which directly adapted from the most prestigious airport evaluation system. The evaluating eight items (observed variables) and the data's normality were tested in the present study which were not observed in the related literature.

Secondly, airports have never been mentioned as tourism destinations before. The importance of airports as shopfronts and may be as "first impressions" was first stated in this particular study. Consequently, the researchers from also tourism may find airports remarkable for future studies.

Final theoretical contribution of the study is more related with the evaluation systems. Presently, the researches adapting the open results of evaluation systems (for any industry) as data are hardly encountered. This study may encourage evaluation systems for announcing their data as well as researchers achieve necessary information easier.

### 5.2 Implications for Practitioners

The results of this particular study achieved some interesting applications for practitioners working in both tourism industry and air transportation business. First, tourism professionals including administrations such as ministries, national tourism-travel associations, tourism companies and airline companies can help designing or redesigning airports better for tourists (arrival/departure) and prospect tourists (transit passengers).

Second, state officials considering the importance of airports as shopfronts, can focus on promoting airports especially for prospective tourists (transit passengers). Turkey has a successful promotion example in 2010. Considering Turkey as a bridge between Europe and Asia, the Turkish flag carrier (TK) started with the 'touristanbul' promotion in 2010 which offered free Istanbul city tour to its transit passengers (Sezgin and Kozak 2012).

Finally, more domestic contribution for practitioners is about Istanbul's new airport. Istanbul's new airport which is opening in 2018, claimed to be the largest around the world. However, there is a Dubai International (DU) airport example which is also a huge airport but still scores 2.92 from Skytrax respondents (the lowest mean score from transit passengers) on 'terminal seating capacity'. Therefore, the new Istanbul Airport officials should consider that necessity is more important than pretentiousness.

### 5.3 Limitations and Suggestions for Future Research

This particular study has some limitations which should be considered for future research. One of the limitations relates to data collection. As mentioned previously, the data of the study was adapted from Skytrax and this could provide addressing the study as 'desk research' for some opportunists. Another limitation could potentially be the method of the study. Since the data is adapted, the exploration and confirmation for unique scale are hardly possible. These insufficiencies abandon creating/learning potential observed variables for the study. Possibly the last, but not the least limitation of the present work, might be the subjects of the study. SC is a permanent five star airport from Skytrax and may be the most suitable for benchmarking as 'best in class (BIC). However, the study results reveal that SC is not a modal transit airport (hub airport). Therefore, a future research consisting a five star but also a hub airport would contribute better for developing airports.

#### References

- Air Cargo Guide. (2013). Airport performance benchmarking. Accessed March 7, 2017, from http://www.aci-na.org/sites/default/files/chapter\_8\_-\_airport\_performance\_benchmarking.pdf
- Babu, A. (2014). A study on benchmarking and service quality of Indian airports. PhD Thesis, Anna University.
- Baker, D., Merkert, R., & Kamruzzaman, M. (2015). Regional aviation and economic growth: Co-integration and causality analysis in Australia. *Journal of Transport Geography*, 43, 140–150.
- Becken, S. (2002). Analysing international tourist flows to estimate energy use associated with air travel. *Journal of Sustainable Tourism*, 10(2), 114–131.
- Beifert, A. (2016). Regional airports' potential as a driving force for economic and entrepreneurship development case study from Baltic sea region. *Entrepreneurship and Sustainability Issues, 3* (3), 228–243.
- Bieger, T., & Wittmer, A. (2006). Air transport and tourism—Perspectives and challenges for destinations, airlines and governments. *Journal of Air Transport Management*, 12(1), 40–46.
- Bows, A., Anderson, K., & Peeters, P. (2009). Air transport, climate change and tourism. *Tourism and Hospitality Planning & Development*, 6(1), 7–20.
- Brueckner, J. (2003). Airline traffic and urban economic development. *Urban Studies*, 40(8), 1455–1469.
- Button, K., & Taylor, S. (2000). International air transportation and economic development. *Journal of Air Transport Management*, 6(4), 209–222.
- Button, K., & Yuan, J. (2013). Airfreight transport and economic development: An examination of causality. *Urban Studies*, 50(2), 329–340.
- Cahill, C., Palcic, D., & Reeves, E. (2017). Commercialization and airport performance: The case of Ireland's DAA. *Journal of Air Transport Management*, 59, 155–163.
- Castro, R., & Lohmann, G. (2014). Airport branding: Content analysis of vision statements. *Research in Transportation Business & Management*, 10, 4–14.
- Changi Airport. (2017). Facilities & services. Accessed April 16, 2017, from http://www.changiairport.com/en/airport-experience/attractions-and services.html#nogo
- Chen, H. L. (2002). Benchmarking and quality improvement: A quality benchmarking deployment approach. *International Journal of Quality & Reliability Management*, 19(6), 757–773.
- Chua, B. L., Lee, S., Kim, H. C., & Han, H. (2017). Investigating the key drivers of traveler loyalty in the airport lounge setting. *Asia Pacific Journal of Tourism Research*, 22(6), 651–665.
- Chung, T. W., Jang, H. M., & Han, J. K. (2013). Financial-based brand value of Incheon international airport. *The Asian Journal of Shipping and Logistics*, 29(2), 267–286.
- Chung, T. W., Ahn, W. C., Jeon, S. M., & Van Thai, V. (2015). A benchmarking of operational efficiency in Asia Pacific international cargo airports. The Asian Journal of Shipping and Logistics, 31(1), 85–108.
- Dmitry, P. (2012). Airport benchmarking and spatial competition: A critical review. Transport and Telecommunication, 13(2), 123–137.
- ETC. (2006). European Travel Commission, European Tourism Insights 2005. Including outlook for 2006, a report of the Market Intelligence Group of the ETC no. 2006/1, Brussels. Accessed April 20, 2017, from http://etc-corporate.org/assets/pdf/reports/etc\_report\_2006\_for\_web-final.pdf
- ETC. (2007). European Travel Commission, European Tourism Insights 2006. Including outlook for 2007, a report of the Market Intelligence Group of the ETC no. 2007/3, Brussels. Accessed April 20, 2017, from http://www.etc-corporate.org/uploads/reports/report\_full\_pdf/8/ETC\_Tourism\_Insights\_2007.pdf
- ETC. (2008). European Travel Commission, European Tourism Insights 2007. Including outlook for 2008, a report of the Market Intelligence Group of the ETC no. 2008/1, Brussels. Accessed April 20, 2017, from http://etc-corporate.org/assets/pdf/reports/annualreport2008\_web.pdf

- Francis, G., Humphreys, I., & Fry, J. (2002). The benchmarking of airport performance. *Journal of Air Transport Management*, 8(4), 239–247.
- Gillen, D. (2008). Benchmarking and performance measurement: The role in quality management. In A. M. Brewer, K. J. Button, & D. A. Hensher (Eds.), *Handbook of logistics and supply-chain management (Handbooks in transport)* (Vol. 2, pp. 325–338). Bingley, UK: Emerald Group.
- Graham, A. (1996, September 2–6). Limits to air transport growth: The demand factors. In PTRC European Forum, 24th European transport forum: Transport policy and its implementation. Uxbridge, UK. London: Brunel University.
- Graham, A. (2005). Airport benchmarking: A review of the current situation. *Benchmarking: An International Journal*, 12(2), 99–111.
- Guiomard, C. (2016). Practical difficulties in airport benchmarking: The case of Dublin Airport. Accessed April 19, 2017, from https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2770070
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). Multivariate data analysis (4th ed.). London: Prentice-Hall International.
- Hakfoort, J., Poot, T., & Rietveld, P. (2001). The regional economic impact of an airport: The case of Amsterdam Schiphol Airport. *Regional Studies*, 35(7), 595–604.
- Halpern, N., & Regmi, U. (2011). What's in a name? Analysis of airport brand names and slogans. *Journal of Airport Management*, 6(1), 63–79.
- Hart, D. A., & Mccann, P. (2000). The continuing growth of London Stansted airport: Regional economic impacts and potential. *Regional Studies*, 34(9), 875–882.
- Holloway, J. C., & Taylor, N. (2006). *The business of tourism* (7th ed.). London: Financial Times Prentice Hall.
- IATA. (2010). Understanding airport benchmarking. Analyst Viewpoint. Accessed April 22, 2017, from https://www.iata.org/whatwedo/Documents/economics/Tretheway-Kincaid\_Airport\_Benchmarking.pdf
- Ismail, S. Z. B. S., & Berhad, M. A. H. (2014). Spearheading airport brand awareness and coverage via social media. *Planning and development Malaysia airports holdings Berhad* (pp. 1–12).
- Istanbul, Istanbul Atatürk International Airport (IAIA). Accessed March 15, 2017., from http://www.ataturkairport.com/tr-tr/basinodasi/documents/ist\_airport\_profile.pdf
- Jarach, D. (2016). Airport marketing: strategies to cope with the new millennium environment. New York: Taylor & Francis.
- Jenkins, C. L. (2015). Tourism policy and planning for developing countries: Some critical issues. *Tourism Recreation Research*, 40(2), 144–156.
- Kamarudin, R. F. (2014). Managing customer expectation for passenger service at airport. Accessed April 13, 2017, from http://www.aci-asiapac.aero/services/main/18/upload/service/ 18/self/55cc68cb431f0.pdf
- Khan, S. A. R., Qianli, D., SongBo, W., Zaman, K., & Zhang, Y. (2017). Travel and tourism competitiveness index: The impact of air transportation, railways transportation, travel and transport services on international inbound and outbound tourism. *Journal of Air Transport Management*, 58, 125–134.
- Kincaid, I., & Tretheway, M. (2009). Methodology choices for benchmarking airports. GARS Workshop on Airport Benchmarking. Accessed March 13, 2017, from https://tr.scribd.com/document/349831755/Methodology-Choices-for-Benchmarking-Airports
- Lee, Y. K., & Park, J. W. (2016). Impact of a sustainable brand on improving business performance of airport enterprises: The case of Incheon International Airport. *Journal of Air Transport Management*, 53, 46–53.
- Lee, M. Y., & So, D. W. (2007). Corporate-slogans of corporations operating in Greater China. *Corporate Communications: An International Journal*, 12(1), 58–74.
- Leung, A., Yen, T. H. B., & Lohmann, G. (2017). Why passengers' geo-demographic characteristics matter to airport marketing. *Journal of Travel & Tourism Marketing*, 34(6), 833–850.
- Linley, P. A., Maltby, J., Wood, A. M., Osborne, G., & Hurling, R. (2009). Measuring happiness: The higher order factor structure of subjective and psychological well-being measures. *Personality and Individual Differences*, 47(8), 878–884.

- Lu, J. L. (2014). Investigating factors that influence passengers' shopping intentions at airports— Evidence from Taiwan. *Journal of Air Transport Management*, 35, 72–77.
- Lumsdon, L. (2000). Transport and tourism: Cycle tourism A model for sustainable development? *Journal of Sustainable Tourism*, 8(5), 361–377.
- Mammadov, R. (2012, May 24–26). The importance of transportation in tourism sector. In 7th Silk Road International Conference "Challenges and opportunities of sustainable economic development in Eurasian countries". Tbilisi-Batumi, GA.
- Martín-Cejas, R. R. (2006). Tourism service quality begins at the airport. *Tourism Management*, 27 (5), 874–877.
- Moon, H., Yoon, H. J., & Han, H. (2017). The effect of airport atmospherics on satisfaction and behavioral intentions: Testing the moderating role of perceived safety. *Journal of Travel & Tourism Marketing*, 34(6), 749–763.
- Olipra, L. (2012, 13–14 June). The impact of low-cost carriers on tourism development in less famous destinations. In *Cittaslow: The value of slowness for the tourism of the future*, Perugia, Italy.
- Papatheodorou, A. (2002). Civil aviation regimes and leisure tourism in Europe. *Journal of Air Transport Management*, 8(6), 381–388.
- Papatheodorou, A., & Lei, Z. (2006). Leisure travel in Europe and airline business models: A study of regional airports in Great Britain. *Journal of Air Transport Management*, 12(1), 47–52.
- Paternoster, J. (2008). Excellent airport customer service meets successful branding strategy. *Journal of Airport Management*, 2(3), 218–226.
- Pawłusz, E., & Polese, A. (2017). "Scandinavia's best-kept secret." Tourism promotion, nation-branding, and identity construction in Estonia (with a free guided tour of Tallinn Airport). Nationalities Papers, 45(5), 873–892.
- Pels, E., Nijkamp, P., & Rietveld, P. (2003). Access to and competition between airports: A case study for the San Francisco Bay area. *Transportation Research Part A: Policy and Practice*, 37 (1), 71–83.
- Percoco, M. (2010). Airport activity and local development: Evidence from Italy. *Urban Studies*, 47 (11), 427–443.
- Prideaux, B. (2000). The role of the transport system in destination development. *Tourism Management*, 21(1), 53–63.
- Rietveld, P., & Bruinsma, F. (1998). Is transport infrastructure effective? Transport infrastructure and accessibility: Impacts on the space economy. Berlin: Springer.
- Rodrigue, J. P., Comtois, C., & Slack, B. (2017). *The geography of transport systems* (4th ed.). New York: Routledge.
- Selvan, B., Arul, S. T., & Thamarai, N. (2017). Benchmarking for Indian Airlines industry in contemporary market scenario. Global Journal of Management and Business Research, 16(12), 18–29.
- Sezgin, E., & Kozak, R. (2012). Surviving in the airline business with a brand image; perception of travel agency ticketing employees on Turkish Airlines. *International Journal of Business and Social Sciences*, 3(12), 290–296.
- Sezgin, E., & Yuncu, D. (2016). The SWOT analysis of Turkish Airlines through Skytrax quality evaluations in the global brand process. In P. Mandal & J. Vong (Eds.), *Development of tourism and the hospitality industry in Southeast Asia* (pp. 65–81). Singapore: Springer.
- Skift, D. P. (2016). The world's best airport is getting ready to double in size. Accessed March 10, 2017, from https://skift.com/2016/03/25/new-changi-airport-terminal/
- Skytrax. (2017a). Latest airport reviews. Accessed April 24, 2017, from http://www.airlinequality.com/
- Skytrax. (2017b). World airport awards. Accessed April 3, 2017, from http://www.worldairportawards.com/Awards/worlds\_best\_airport.html
- Tabachnick, B. G., & Fidell, L. S. (2011). Using multivariate statistics (6th ed.). Boston: Pearson.

- Tovar, B., & Martin-Cejas, R. R. (2009). Are outsourcing and non-aeronautical revenues important drivers in the efficiency of Spanish airports? *Journal of Air Transport Management*, 15(5), 217–220.
- Tsamboulas, D., & Tatsi, C. (2007, 24–28 June). Benchmarking methodology for mid-size airports performance. In *World Conference on Transport Research Society, 11th World Conference on Transport Research*. Berkeley, California, France.
- Tse, I. A. (2009). An empirical study of airport branding at selected Canadian international airports. MBA, University of Calgary.
- Tsui, K. W. H. (2017). Does a low-cost carrier lead the domestic tourism demand and growth of New Zealand? *Tourism Management*, 60, 390–403.
- Turton, B. J., & Mutambirwa, C. C. (1996). Air transport services and the expansion of international tourism in Zimbabwe. *Tourism Management*, 17(6), 453–462.
- UNWTO. (2016). Tourism highlights. Accessed May 3, 2017, from http://www.dadosefatos. turismo.gov.br/images/pdf/estatisticas\_indicadores/UNTWO\_Tourism\_Highlights\_2016\_Edition.pdf
- von Hirschhausen, C., & Cullmann, A. (2005, 24–25 November). Questions to airport benchmakers

   some theoretical and practical aspects learned from benchmarking other sectors. In *German Aviation Research Society Workshop, Benchmarking and airport competition.* Vienna, Austria.
- Wheeller, B. (1991). Tourism's troubled times. Tourism Management, 3(2), 91–95.
- Wiltshire, J. (2018). Airport competition: Reality or myth? *Journal of Air Transport Management*, 67, 241–248.
- Wuensch, K. L. (2016). Skewness, kurtosis and the normal curve. Accessed December 22, 2016, from http://core.ecu.edu/psyc/wuenschk/docs30/Skew-Kurt.docx
- Yoshida, Y. (2004). Endogenous-weight TFP measurement: Methodology and its application to Japanese-airport benchmarking. Transportation Research Part E: Logistics and Transportation Review, 40(2), 151–182.

# Emerging Brand Meanings in Wearable Sports Technology: A Case Study on Suunto Sports Watches



Hilla Karamaki, Sonja Lahtinen, and Pekka Tuominen

**Abstract** The purpose of this study is to describe and analyse emerging brand meanings in the context of wearable sports technology. The theoretical framework is built on the concept of wearable sports technology and the contemporary literature on brand meanings. This empirical research is based on a case study of the Suunto Ambit3 Sport Sapphire watch. A qualitative projective ZMET-method is applied to generate data from ten interviews with Finnish female customers who own the Suunto Ambit3 Sport Sapphire watch. Eight themes are identified that incorporate several interconnected sub-meanings: well-being, connecting with nature, setting and achieving goals, expressing style, appreciating technological advancement, relying on professionalism, testing one's limits, and embracing special experiences.

**Keywords** Brand Meanings · Wearable Sports Technology · ZMET-method

#### 1 Introduction

Wearable sports technology is a relatively new phenomenon, and thus it has not yet been extensively studied in the field of marketing research. As wearable sports technology has several advantages, such as exploiting personal data to support health- and exercise-related goals, it can be argued that there is a need to create a better understanding of wearable sports technology also from the consumer's point of view.

Wearable technology is a complex phenomenon, because it integrates characteristics of clothing-related issues, like aesthetics and comfort, and the properties of electronic devices, such as usability. The complexity of wearable technology is only intensified by the collaboration of several stakeholders, such as end-users, engineers, fashion designers, and manufacturers (McCann 2009). In addition to combining technology- and clothing-related fields, wearable technology is closely connected

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with the field of health and fitness (Gao et al. 2015). In view of this, the context of wearable sports technology can be defined by three different dimensions: the fields of sports brands, technology, and fashion.

In the context of sports brands, Bouchet et al. (2013) suggest that sports brands should be divided into four dimensions: the functional, the sensorial, the semantic, and the somatic. Most of the elements that these four dimensions consist of can also be found in the brand dimensions of other types of brands, such as luxury brands or technology brands. However, unlike other definitions of brands, sports brands include the somatic dimension, which describes the bodily features. In the case of sports brands, the physical aspect needs to be considered, since bodily experiences while doing sports are an important part of consuming sports brands and the overall brand experience.

In the context of technology consumption, a major stream of research focuses on technology adoption. It discusses consumers' cognitive motivations and behaviour in adopting new technologies (Venkatesh et al. 2012). Researchers have found that users have an increasingly important and interactive role when it comes to the design, development, and marketing of technology brands (Vannoy and Palvia 2010).

In the context of fashion, consumer behaviour is driven on the one hand by the need to belong to a community, and on the other hand by the need to differentiate oneself from others. According to Han et al. (2010), consumers can manage this need by favouring either prominent or silent branding. In their study on different luxury consumers, they found that depending on the consumers' state of wealth and need for status, consumers either favour the prominent or more discrete visibility of brands to either connect with or differentiate themselves from a specific reference group.

The purpose of this study is to describe and analyse emerging brand meanings in the context of wearable sports technology. Prior research has investigated sports technology brands from the perspective of buyer behaviour and decision-making (Hamann et al. 2007), but only limited research has been conducted from the perspective of brand meaning. Understanding brand meanings is essential for future brand development and marketing strategies within the emerging field of wearable sports technology.

# 2 Theoretical Framework for Brand Meanings in Wearable Sports Technology

### 2.1 The Structure and Creation of Brand Meanings

Brands attach meanings to goods. This can be considered one of the most important functions of branding (Muniz 1997). According to Batey (2008), the structure of brand meanings can be defined on four levels, reflecting the continuum from

tangible, more objective perceptions towards intangible properties that refer to more subjective perceptions. As brand meanings are defined by a smaller group of people, such as a specific culture or sub-culture, the intangible properties become more relevant. On the individual level, brand meanings are subjectively defined, as they emerge from personal experiences with an object, resulting in a personal meaning that varies between individuals (Batey 2008).

The division of the tangible and intangible properties of meanings is related to the concept of primary and implicit brand meanings. Primary brand meanings refer to the primary associations and perceptions that immediately come to the consumers' minds concerning a specific brand (Chard 2013). Implicit brand meanings refer to the psychic resonance that the brand offers to consumers. Implicit brand meanings tend to be more culturally influenced and less category-dependent than primary brand meanings (Chard 2013).

Traditionally, it has been thought that advertising agencies and brand managers are the creators of brand meanings. The role of the consumer has been seen mainly as the receiver and acceptor of that communicated meaning. However, recently it has become clear that brand meanings are not solely constructed in advertising, but rather in the consumers' minds (First 2009). The creation of brand meanings should not be thought of as something that only concerns the brand and the consumer. This perspective restricts the role of meaning-makers, leaving out many other parties, such as the institutions and public (McInnis et al. 2014).

Ligas and Cotte (1999) suggest that brand meanings are created in three environments. These environments include the marketing environment, the individual environment, and the social environment. The marketing environment acts as the initiator of brand meaning (Malar et al. 2011). In the individual environment, the self-concept influences the creation and nature of brand meanings (Kleine and Kleine 2000). In the social environment, brand meanings are actively and continuously created and altered between different social entities; the reference groups of these social entities appear to be very important (English and Solomon 1995). Ligas and Cotte (1999) suggest that brand meanings are created through the interaction of these three environments.

### 2.2 The Synthesis of the Theoretical Framework

The theoretical framework of this study encompasses two different domains. These domains are the context of wearable sports technology and the context of brand meanings. The synthesis of the theoretical framework is based on the interaction between these domains. The synthesis of the theoretical framework is illustrated in Fig. 1 (Karamaki et al. 2018, p. 240).

As wearable sports technology products are by definition wearable, it is also essential to consider the fashion aspect in this study. Clothing might be the primarily means of communicating social identity, as it reflects the values of the related social group (Auty and Elliott 1998).

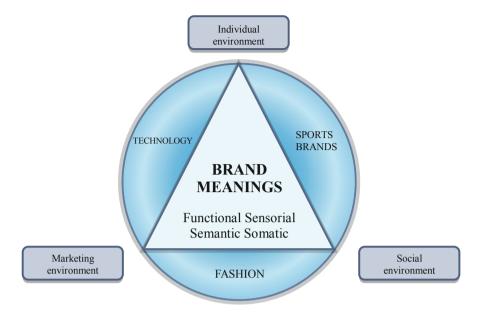


Fig. 1 The synthesis of the theoretical framework (Source: Karamaki et al. 2018, p. 240)

### 3 Conducting the Study

### 3.1 Qualitative Case Study and the Case Company Suunto

The nature of the research phenomenon should define the most applicable method of inquiry (Silverman 2005). This study applies qualitative research methods. Qualitative methodology aims to understand complex phenomena in a systematic way, rather than to establish unequivocal causal relationships between single variables (Gummesson 2005). Thus, qualitative methods are sensitive to the context of the phenomenon and aim to create a holistic understanding of the research topic (Eriksson and Kovalainen 2016).

In this study, theory and empirical reality are created in a non-linear way where theoretical knowledge and empirical findings take place simultaneously during the phases of data generation and analysis. This type of knowledge-building process is known as the hermeneutical spiral. It refers to a research process in which the researcher moves back and forth from pre-understanding to a higher level of understanding, in this way creating interaction between the already known and what was just learned (Gummesson 2005).

When seeking a deeper understanding of a specific phenomenon, a case study method is recommended. A case study enables the profound examination of the dynamics of a phenomenon (Yin 2013). This study aims to understand and produce an interpretation of the phenomenon of wearable sports technology from the customers' perspective. Suunto is an established wearable sports technology company,

and it was therefore chosen as a suitable case study company for this study. Suunto is a Finnish company that manufactures sports watches, dive computers, and compasses for demanding outdoor sports, and it is known for premium quality technology products that are sold in over 100 countries (Suunto 2016).

In order to gain a rich insight from the customers of Suunto, one sports watch model and its users were selected as a target group for this study. A premium sports watch model, namely the Suunto Ambit3 Sport Sapphire, was chosen because the model is visually designed to be used also outside sports. The Suunto Ambit3 Sport Sapphire, Suunto's first premium model sports watch specifically for women, was launched in 2014. The Ambit3 Sport Sapphire is an eye-catching multisport GPS watch crafted from premium materials with mobile connection and Ambit3 sport software. Its features include speed, pace, and distance measurement, GPS, route navigation, compass, heart rate tracking also during swimming, and recovery tests among other features (Suunto 2017).

#### 3.1.1 The Zaltman Metaphor Elicitation Technique

Most of today's marketing research techniques rely on verbal communication as a method of collecting data. However, the consensus among cognitive scientists and communication specialists is that most human communication is nonverbal (Catchings-Castello 2000). This should also be considered in consumer research. When researchers are pursuing a deeper understanding of consumers' thoughts and feelings, nonverbal research techniques could potentially help to uncover a richer picture of consumers' thinking. To achieve this, marketers need to understand the cognitive structures—or mental models—that affect consumers' feelings and behaviour regarding a specific brand or product (Christensen and Olson 2002).

The first step towards a better understanding of consumers' mental models is to understand the process of thinking and communication. Neuroscientists know that thoughts typically emerge as images, even though they are expressed verbally (Zaltman and Coulter 1995). An image is an internal representation used in information processing that is experienced as a conscious thought. Even though verbal language plays an important role in the communication of thoughts, it is not the same as thought (Zaltman 1997). While thinking is based on images rather than on language, it is also important to enable consumers to represent their thoughts in nonverbal terms. In this way, researchers can get closer to the state in which consumers' thoughts occur and thus be able to learn more about consumer thinking (Zaltman and Coulter 1995).

Gerald Zaltman developed the Zaltman metaphor elicitation technique (ZMET) in the early 1990s (Christensen and Olson 2002). ZMET is based on several different fields of research, such as cognitive neuroscience, neurobiology, art criticism, visual anthropology, semiotics, and psycholinguistics. ZMET integrates the visual projection technique, in-depth personal interviews, and qualitative data-processing techniques (Catchings-Castello 2000).

The key concepts of ZMET include photo-analysis and narration. ZMET allows the participants to collect their own pictures based on specific guidance from the researcher. Having participants collecting their own pictures increases the likelihood that important and previously unrecognised issues will arise from the research (Zaltman 1997). The application of ZMET consists of four phases: pre-interview, interviews, transcription, and the development of aggregate mental maps (Sugai 2005). In the first phase, the participants are given a precise description of the research topic and asked to collect typically 8–10 pictures to bring to the interview, which usually takes place 1–3 weeks later.

The actual interviews consist of several steps (Zaltman 1997). According to Catchings-Castello (2000), the steps must be modified to support the objectives of the specific research project when necessary. In the first step, storytelling, the participants are asked to describe the content of each picture collected. In the second step, missed images, the participants are asked if there was anything that they wanted to include in the pictures, but were not able to find a picture of. Participants are also asked about the relevance of the possibly missing images. In the third step, sorting, the participants sort their pictures into meaningful sets and remove possible duplicates. The fourth step, construct elicitation, is the phase in which the researcher randomly selects three pictures; the participants are asked to combine two of the three pictures and to describe why they are similar and why they differ from the third picture. This process is continued until no new constructs emerge.

### 3.2 Data Generation and Analysis

The research participants were recruited either through an official Facebook advertisement by Suunto (five participants) or by using snowball sampling (five participants), which involved using the researchers' network at Suunto and the contacts of the other interviewees. The Facebook recruitment advertisement was considered a suitable recruitment method since the participants volunteered willingly to participate in the research. Thus, it was expected that these participants would be willing to offer rich and high-quality data for research purposes. However, as this method did not produce enough volunteer participants, the snowball sampling method was used. The participants that were recruited through the Suunto employees' network were either directly asked or had noticed an announcement on Suunto contacts' personal Facebook feed. Altogether ten female owners of the Suunto Ambit3 Sport Sapphire watch were interviewed. The interviewees were all female, since the product under consideration is targeted especially at women. The age of the participants ranged between 32 and 50, with the majority being between 32 and 40. This matches the age of the average Suunto customer well.

Once all the interviews were completed, all the interview transcripts, tapes, and images were reviewed to identify key themes or constructs and construct pairs. A construct itself has little innate meaning; rather, meanings are acquired through causal associations with other constructs (Zaltman 1997). In order to find the

important constructs that consumers attach to the Suunto Ambit3 Sport Sapphire watch, the analysis was done in two phases. First, individual mental maps were formed, and then they were combined into an aggregated consensus map to represent the collective mental model of the respondents (Christensen and Olson 2002).

Each interview transcript was coded to represent the thoughts and themes that arose during the interview. According to Zaltman and Coulter (1995), the list of key themes or constructs derived from the examination of the interview transcripts serves as a starting point for the coding process. Once previously unidentified constructs were found during the coding, the construct list was supplemented. This meant that the transcripts were analysed in several rounds, making the coding process yield well-grounded interpretations.

After no more constructs were found, the collective consensus map was formed to understand which constructs were most important to the participants. First, the consensus map represented a mass of constructs and links, but specific constructs or themes were selected for the consensus map based on the number of participants who mentioned them (Zaltman and Coulter 1995). According to Zaltman (1997), a construct must be mentioned by at least half of the interviewees in order to be included in the consensus map, and the constructs selected for the consensus map should comprise 85 percent of the constructs mentioned by any interviewee.

### 3.3 Evaluation of the Research Quality

The evaluation of the research quality is based on the criteria most often used in qualitative research, namely trustworthiness (Lincoln and Guba 1985). Trustworthiness can be divided into four domains: dependability, transferability, credibility, and conformability (Eriksson and Kovalainen 2016).

Dependability can be determined by evaluating how well the research process is documented. According to Eriksson and Kovalainen (2016), the research should be able to indicate proper traceability and logic in order to obtain transparency. Dependability is valuable as it allows the reader to evaluate the overall quality of the research process (Moisander and Valtonen 2006). To support the transparency of the research process, all parts of the research—from the emergence of the research purpose, theory development, detailed descriptions of data generation, and the analysis to the detailed description of the situational factor of the research—must be explicitly documented and presented. The ZMET interviews were recorded and transcribed to enable the researchers to return to the data and make the correct analysis.

Transferability refers to showing a connection between the current and previous research (Eriksson and Kovalainen 2016). The researcher should be able to find similarities between the research—or parts of it—and the already existing literature. Limited similarities between themes that are closely linked with the phenomenon, namely the field of sports brands, technology adoption, and fashion, were found. In

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addition, some higher-level similarities in fundamental concepts related to the literature and findings concerning brand meaning and related issues were identified.

Credibility refers to the researcher's knowledge of the topic as well as to the sufficient quantity and quality of the data gathered. The researcher needs to be familiar with the research topic, and the presented data must be adequate to support the conclusions (Eriksson and Kovalainen 2016). This research process started eight months prior to the execution of the first interview, during which the researchers closely familiarised themselves with the phenomenon through literature and media, by attending several essential events, and by discussing the wearable sports products category with relevant sales experts.

Conformability refers to connecting the findings and research interpretations firmly with the data in a way that enables other people to understand them (Eriksson and Kovalainen 2016). The concept of conformability stems from the postulate of objectivity (Denzin 1994), but in constructionist research, complete objectivity cannot be achieved as the creation of knowledge is often based on examining subjective perspectives. In addition to the subjective views of the research informants, constructive research is largely based on the interpretation of the researcher. However, conformability requires that the research findings stem from the research informants rather than from the imagination of the researcher (Lincoln and Guba 1985). To increase conformability in this study, the interpretative findings were closely linked to the empirical data by supplying the reader with a variety of actual quotations.

### 4 Brand Meanings in a Wearable Sports Technology Brand

### 4.1 The Eight Empirical Themes of Brand Meanings

This section discusses the findings of our case study and presents the brand meanings the informants attached to the Suunto Ambit3 Sport Sapphire watch. Eight empirical themes related to brand meanings were identified: well-being, connecting with nature, expressing style, appreciating technological advancement, setting and achieving goals, relying on professionalism, testing ones limits, and embracing special experiences. Each of these eight themes of brand meanings had several sub-meanings and they are next discussed in detail.

#### 4.1.1 Well-Being

Among sports brands, one of the common aspects of corporate social responsibility is the promotion of health-related initiatives (Bouchet et al. 2013). Each interviewee brought up the theme of well-being during the interview, which reflects the tendency of valuing a healthy lifestyle. The brand meaning of well-being consisted of two sub-meanings: physical well-being and mental well-being. Both of these

sub-meanings are highly constructed through bodily experiences and behaviours, such as physical exercise or the bodily experience of endorphins and well-being, as described by some participants. Thus, as suggested in previous research, the dimension that is typical for sports brands, namely the somatic dimension (Bouchet et al. 2013), was also identified in this study.

#### 4.1.2 Connecting with Nature

The theme of nature was very prominent in the meanings the participants connected with the Suunto Ambit3 Sport Sapphire watch. Every participant mentioned nature, and several participants had selected the majority of their pictures to depict nature scenery or outdoor sports.

Previous marketing research has described connecting with nature as a romantic idea that helps consumers escape the hectic pace of modern life (Arnould 2007). Furthermore, romantic writers and artists have embraced nature as an organic, fertile, and mystical force that people can visit to recover from stress (Thompson 2004). These notions could also be found in the empirical data of this study. Nature seemed to play an integral role in the participants' hobbies. Several participants also mentioned sports like downhill skiing, cycling, or climbing, which are closely linked to the element of nature.

The brand meaning of connecting with nature comprised several sub-meanings. The sub-meanings of relaxation, escaping stress, and taking time for yourself represent the traditional romantic relationship towards nature where nature is seen to have healing power and help individuals to reconnect with themselves. On the other hand, the sub-meanings of adventure, overcoming the challenges of nature, and enjoying life are more dynamic, representing excitement and action.

#### 4.1.3 Setting and Achieving Goals

The very feature that makes the watch a piece of wearable sports technology—the ability to measure sports-related data—was brought up throughout the data and linked together with several sub-meanings, such as analysing the data, gaining motivation through the data, improving oneself, and setting and achieving goals. For several participants, measuring the data seemed to have an instrumental value in supporting their motivation and goals, but to some participants the data itself also seemed to be valuable. Regardless of whether measuring data was seen as a valuable brand meaning in itself or as an instrumental meaning, it was perceived as a very important meaning related to engaging in sports.

The brand meaning of setting and achieving goals consisted of four highly interconnected sub-meanings. The meaning of setting and achieving goals builds on the tangible benefit of the product, namely data measurement and analysis. Thus, it could be argued that setting and achieving goals is rooted in the functional dimension (Bouchet et al. 2013) of the Suunto Ambit3 Sport Sapphire watch. The

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functional benefits of the product helped the participants to be their own coaches, to motivate themselves, and to set and achieve exercise-related goals. It could be said that the functional features of the watch served as a mental coach, which represents the deeper metaphor of achievement through work and improving oneself.

#### 4.1.4 Expressing Style

Possessions can be used to satisfy one's psychological needs, such as creating one's self-concept, expressing self-identity, and allowing one to differentiate oneself from others (Escalas and Bettman 2005). Possessions can also serve a social purpose, reflecting one's ties to, e.g., cultural groups and communities, which can include brand communities and thus also leisure-related communities (Muniz and O'Guinn 2001). The participants confirmed that through using the Suunto Ambit3 Sport Sapphire watch, they could express their style and thereby create and communicate their self-concept, thus also connecting themselves with others that share a similar style and interests. Several participants had collected pictures representing style and accessories. It is apparent that in addition to the benefits of the technology embedded in the watch, the participants view the watch as a style piece that communicates specific messages about the wearer.

The empirical data revealed several sub-meanings in the brand meaning of expressing style. The various aspects of style that the participants saw the watch as representing—high quality, luxury, sportiness, trendiness, and modernity—all together appeared to make the watch a statement of taste and lifestyle. As meaningful communication enables consumers to connect with desired social groups (Ligas and Cotte 1999), through wearing the watch, the participants were able to make a statement and connect with other, similar people. What seemed to make the watch desirable in terms of style was the fact that all these aspects were brought together.

#### 4.1.5 Appreciating Technological Advancement

Several participants mentioned the watch's technology during the interviews. It was apparent that the participants connected the watch with an image of high quality technology and progressiveness. The technological qualities of the product could be connected closely to the functional dimension of the product, as they present the functionality, quality, and durability of the product (Wiedmann et al. 2007).

The brand meaning of appreciating technological advancement was constructed around three sub-meanings. The sub-meanings of believing in the potential of technology and valuing the ideal of advancement represent the more abstract level of appreciation, whereas valuing useful innovation, such as making things more convenient, represents a more tangible aspect of the brand meaning.

#### 4.1.6 Relying on Professionalism

Several participants brought up the matter of professionalism. The brand meaning of professionalism contains different aspects: safety, intelligent technology, extreme environments, and professional athletes. The meaning of professionalism seemed to make the participants feel good about their purchase and their connection with the Suunto brand.

The brand meaning of relying on professionalism consisted of four sub-meanings: valuing high quality, looking up to professionals, considering safety issues, and appreciating challenging environments. Somewhat similarly to the brand meaning of expressing style, the brand meaning of relying on professionalism also reflects the symbolic and expressive dimension of the brand (Bouchet et al. 2013).

#### 4.1.7 Testing One's Limits

Training and doing different kinds of sports was prominently the most discussed issue during the interviews, as almost all the participants had collected sports-related pictures. Several participants talked about heavy exercise and pushing one's limits during training. This image of challenging oneself and excelling was seen as an important mental and physical goal related to training and sports activities. Overcoming challenges could be seen as an important brand meaning that the participants also connected with the Suunto sports watch.

The brand meaning of testing one's limits comprises four highly interconnected sub-meanings, and is fundamentally connected with the brand meaning of appreciating technological advancement, as both meanings share the orientation towards achievement and excellent performance. However, unlike in the technology aspect, testing one's limits is more of a mental and behavioural orientation, whereas the technology aspect relies more on the functionality and performance of the device. Testing one's limits also seemed to be appreciated as a philosophy or an orientation towards life. By having the attitude of testing one's limits, participants could seemingly build their sense of self as achievers.

#### 4.1.8 Embracing Special Experiences

Throughout the empirical data, it was evident that some of the participants seemed to value some moments, occasions, and experiences over others. While participants discussed their experiences, there was a clear line between ordinary training and experiences and special sporting moments like competitions or other activities. During the interviews, the participants brought up experiences they had enjoyed regardless of how strongly the experiences were sports-related. The majority of the experiences the participants brought up and highlighted were somehow special, but also ordinary training moments in nature were described with enthusiasm.

The brand meaning of embracing special experiences was constructed upon four sub-meanings. According to Bouchet et al. (2013), brands can act as experience producers, and thus it is obvious that here the brand meaning of embracing special experiences reflects the sensorial and experiential dimension. The special experiences that the participants embraced comprised a combination of the elements of mental and physical well-being, connecting with nature, achieving goals, and testing one's limits.

### 4.2 Re-evaluation of the Theoretical Framework

The synthesis of the re-evaluated theoretical framework in this study suggests that the concept of wearable sports technology consists of three main domains: the field of technology, the field of sports brands, and the field of fashion. In light of the empirical findings, these three fields combined serve as an applicable context that characterises the field of wearable sports technology. This evaluation stems from the fact that among the brand meanings, the participants attached brand meanings to the Suunto Ambit3 Sport Sapphire watch such as appreciating technological advancement (technology), setting and achieving goals, testing one's limits, well-being, connecting with nature (sports), and expressing style (fashion). Figure 2 illustrates the re-evaluated theoretical framework (originally created by Karamaki et al. 2018) with eight empirical themes of brand meanings based on our case study.

As Suunto represents sports brand, the theoretical framework predicted that the brand meanings would reflect the four dimensions typical for sports brands: the functional, the sensorial, the semantic, and the somatic. This view was supported by the empirical research findings, as every predicted dimension was found in the brand meanings. The functional dimension was represented in the brand meaning of setting and achieving goals and the sub-meanings of measuring and analysing data, appreciating technological advancement, valuing high technology, and valuing useful innovation. The sensorial dimension was reflected in the brand meaning of embracing special experiences and sub-meanings of connecting with nature—e.g. through relaxation—taking time for yourself, and admiring challenging environments. Considering the semantic dimension, all brand meanings seemed to have expressive and symbolic features, especially the brand meaning of expressing style. Considering the somatic dimension that is uniquely typical for sports brands, the brand meanings of well-being and testing one's limits reflected the somatic dimension, as the participants frequently described bodily behaviours, i.e. training.

Altogether eight interconnected brand meanings were attached to the Suunto Ambit3 Sport Sapphire watch. These brand meanings were well-being, connecting with nature, setting and achieving goals, expressing style, appreciating technological advancement, relying on professionalism, testing one's limits, and embracing special experiences. Three of these brand meanings were clearly emphasised throughout the data—namely setting and achieving goals, well-being, and connecting with nature.

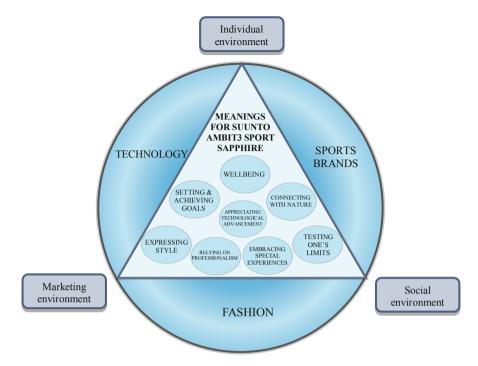


Fig. 2 The re-evaluated theoretical framework (Source: Karamaki et al. 2018, p. 240 and empirical findings from this case study)

### 5 Discussion and Concluding Remarks

#### 5.1 Theoretical Contribution

Scientific research should always add to the already existing body of knowledge in some way. To make a theoretical contribution, research should provide new information and explanations on theory, methodology, or context (Ladik and Stewart 2008). This study concentrated on examining the emerging field of wearable sports technology brands from a new perspective, and, therefore, produced a mainly methodological and contextual contribution.

A methodological contribution can be generated by constructing and testing a new method, by altering an old method, or by using a method in a context that has not been examined using that method before (Ladik and Stewart 2008). This study applied the Zaltman metaphor elicitation technique (ZMET) in the context of a wearable sports technology brand. Such brands have earlier been investigated mainly from the perspective of buyer behaviour and decision-making (Hamann et al. 2007), but little research has been conducted to investigate the brand meanings consumers attach to wearable sports technology brands. This study contributed methodologically, as it qualitatively examined the meanings consumers attach to a

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wearable sports technology brand and to a specific model—the Suunto Ambit3 Sport Sapphire—by applying ZMET.

The contextual contribution refers to adding to the existing knowledge about a specific context (Ladik and Stewart 2008). Here, the contextual contribution was achieved as the study concentrated on examining the emerging phenomenon of wearable sports technology brands. This field of inquiry has not yet received much attention within academic marketing research, despite the obvious call for it. This study added to the knowledge and understanding of what kinds of meanings consumers can attach to wearable sports technology brands.

### 5.2 Managerial Implications

Marketing research should also always seek to offer useful insights to practitioners. This study examined the context of wearable sports technology that has until now attracted surprisingly little attention from the perspective of consumer research. In addition to offering valuable information to Suunto, the findings of this study provide valuable insights into how consumers perceive wearable sports technology brands in the larger market of wearable sports technology. The following observations can be utilised both in product development and in branding and marketing strategies.

First, attention to the ways marketing research is conducted should closely considered. In order to gain a deeper and more insightful understanding of consumer perceptions and behaviour, researchers must engage managers and customers more actively in the research process by enabling them to fully present their thinking (Zaltman 1997). Accessing the underlying themes and values behind consumer thinking helps marketers to better understand the motivations behind consumer behaviour. Traditionally, marketing research has concentrated on using linguistic techniques, but it has been found that thinking is actually based on images rather than words (Zaltman 1997). The usage of images to gain empirical data might help to generate a fuller understanding of consumer thinking. Therefore, we propose that projective ZMET be used in conveying consumers' subconscious thinking.

This study revealed eight thematic brand meanings that female customers of Suunto attach to the Suunto Ambit3 Sport Sapphire watch. These meanings can help marketers and product development to better understand the themes that are important to female consumers within the wearable sports technology field. It should be noted that the themes that arose from this study in the form of varying brand meanings are self-expressive in nature, and would rate highly in a hierarchy of products of mere necessity versus products with symbolic value. Furthermore, the variety of different brand meanings is worthy of note. We suggest that marketers of wearable sports technology brands evaluate whether their strategic portfolio incorporates the full potential of all these brand meanings. Next, to offer some reference ideas, some selected brand meanings are briefly analysed from the perspective of practical implications.

The theme of luxury emerged though the brand meaning of expressing style. Some participants saw this as an admirable thing, while others found it did not fit the desired simple style they were keen to express. Thus, there might be more varying needs and desires in the form of niches or segments within the female target market that marketers could identify and thus develop better-targeted wearable sports technology products and brands.

Another possibly insightful implication might lie in the brand meaning of well-being. In addition to physical well-being, mental well-being was also emphasised as an important aspect that the female consumers linked to the overall brand meaning of well-being. Thus, it might be valuable to scrutinise the possible activities and features that would incorporate the mental aspect of well-being into the product. Mental well-being could also be emphasised in branding and marketing activities.

Connecting with nature emerged as an important brand meaning that incorporated several aspects in the form of sub-meanings. Connecting with nature incorporated both a relaxing aspect and a challenging aspect. Regardless of the aspect, nature seemed to have a central role in how the participants viewed the Suunto Ambit3 Sport Sapphire watch. Therefore, marketers should consider whether they are exploiting the metaphors linked to nature to their fullest potential in their current marketing. In this study, nature seemed to call for deeper metaphors of adventure or relaxation. We advise that the metaphors linked to nature are thoroughly exploited in marketing and branding, e.g., by the means of storytelling or experiential marketing.

The brand meaning of relying on professionalism seemed to be rooted in the heritage of the Suunto brand. Suunto was seen as a reliable and ultimately high performance brand. This image seemed to rest on perceptions of the challenging environments in which Suunto products can be used. For example, the heritage of the diving products seemed to extend the high-quality image to cover the whole brand and product range, even the models that did not actually incorporate such features. Therefore, we suggest that images of these challenging environments, which are linked to the brand and emphasise the dependability and performative aspects, should be exploited more in the branding strategy.

#### 5.3 Further Research Directions

Wearable sports technology is an emerging and continuously growing field that has not received much attention within marketing research. It is obvious that it needs to be studied further. It is important to examine the meanings consumers attach to wearable sports technology brands more closely. Wearable sports technology products are the first technology product category that people are continuously wearing, which also makes the phenomenon an interesting topic for researchers. The brand meanings consumers attach to wearable sports technology should be studied in order to produce a more in-depth understanding upon which marketers can develop the products and related marketing strategies.

It must be noted that this study has its limitations and therefore leaves much space for further research. Firstly, this specific study concentrated on one specific brand model, the Suunto Ambit3 Sport Sapphire watch, which is especially designed for women. In order to gain a more versatile understanding, it would be necessary to 386 H. Karamaki et al.

conduct research with informants of both genders. As technology has traditionally been considered more masculine in nature, it would be interesting to see whether there are gender differences in brand meanings associated with wearable sports technology.

Secondly, the age of the participants of this study ranged from 32 to 50 years. It would be interesting to examine whether younger consumers attach different meanings to wearable sports technology brands, as the younger generation has already been familiarised with technology since childhood. Thirdly, this study consisted of informants located only in Finland. Therefore, it would be valuable to generate a more international perspective by studying consumers from other geographical locations. If such studies are conducted, we suggest that the socio-economic atmosphere be taken into consideration, as the meanings attached might vary among countries and areas. People living in a technology-affirmative atmosphere, such as in larger cities and developed countries, might attach different meanings to wearable sports technology products than people living in rural or remote areas. This might affect the values and features consumers are looking for in wearable sports technology products and brands.

Finally, this study concentrated on brand meanings attached to a premium watch model, the Suunto Ambit3 Sport Sapphire. The market for wearable sports technology includes products of different levels of quality and with different brand images. Therefore, it would be insightful to examine brand meanings related to other product or model categories determined by how prestigious or high quality they are intended to be by the manufacturer and how they are perceived by consumers.

#### References

Arnould, E. (2007). Should consumer citizens escape the market? *The Annals of the American Academy of Political and Social Science*, 611(1), 96–111.

Auty, S., & Elliott, R. (1998). Fashion involvement, self-monitoring and the meaning of brands. *Journal of Product and Brand Management*, 7(2), 109–123.

Batey, M. (2008). Brand meaning. New York: Routledge.

Bouchet, P., Hillariet, D., & Bodet, G. (2013). Sport brands. New York: Routledge.

Catchings-Castello, G. (2000). The ZMET alternative. Marketing Research, 12(2), 6–12.

Chard, C. (2013). Understanding the brand meaning of the Canadian interuniversity sport hockey league: An insurance policy if all else fails! *Sport in Society*, 16(3), 327–339.

Christensen, G., & Olson, J. (2002). Mapping consumers' mental models with ZMET. Psychology and Marketing, 19(6), 477–502.

Denzin, N. (1994). The art and politics of interpretation. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 500–515). Thousand Oaks: Sage.

English, B., & Solomon, M. (1995). To be and not to be: Lifestyle imagery, reference groups, and the clustering of America. *Journal of Advertising*, 24(1), 13–28.

Eriksson, P., & Kovalainen, A. (2016). Qualitative methods in business research. London: Sage. Escalas, J., & Bettman, J. (2005). Self-construal, reference groups and brand meaning. Journal of Consumer Research, 32(6), 378–389.

First, I. (2009). Brand meaning and its creation in a cross-cultural context. In Academic dissertation. St. Gallen: Publications of University of St. Gallen.

- Gao, Y., Li, H., & Luo, Y. (2015). An empirical study of wearable technology acceptance in healthcare. *Industrial Management and Data Systems*, 115(9), 1704–1723.
- Gummesson, E. (2005). Qualitative research in marketing. A road-map for a wilderness of complexity and unpredictability. *European Journal of Marketing*, 39(3/4), 309–327.
- Hamann, D., Williams, R., & Omar, M. (2007). Branding strategy and consumer high technology product. *Journal of Product and Brand Management*, 16(2), 98–111.
- Han, Y., Nunes, J., & Dréze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15–30.
- Karamaki, H., Lahtinen, S., & Tuominen, P. (2018). Building a conceptual model for brand meanings in wearable sports technology. In M. H. Bilgin, H. Danis, E. Demir, & U. Can (Eds.), Eurasian business perspectives, Eurasian studies in business and economics (Vol. 8/1, pp. 233–243). Cham: Springer.
- Kleine, R., & Kleine, S. (2000). Consumption and self-schema changes throughout the identity project life cycle. *Advances in Consumer Research*, 27(1), 279–285.
- Ladik, D., & Stewart, D. (2008). The contribution continuum. *Journal of the Academy of Marketing Science*, 36(2), 157–165.
- Ligas, M., & Cotte, J. (1999). The process of negotiating brand meaning. *Advances in Consumer Research*, 26(1), 609–614.
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. London: Sage.
- Malar, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, 75(4), 35–52.
- McCann, J. (2009). End-user based design of innovative smart clothing. In J. McCann & D. Bryson (Eds.), *Smart clothes and wearable technology* (pp. 4–24). Boca Raton: CRC Press.
- McInnis, D., Whan Park, C., & Priester, J. (2014). *Handbook of brand relationships*. New York: Routledge.
- Moisander, J., & Valtonen, A. (2006). *Qualitative marketing research: A cultural approach*. London: Sage.
- Muniz, A. (1997). Consumers and brand meaning: Brands, the self and others. *Advances in Consumer Research*, 24(1), 308–310.
- Muniz, A., & O'Guinn, C. (2001). Brand community. *Journal of Consumer Research*, 27(4), 412–431.
- Silverman, D. (2005). Doing qualitative research: A practical handbook. London: Sage.
- Sugai, P. (2005). Mapping the mind of the mobile consumer across borders. An application of the Zaltman metaphor elicitation technique. *International Marketing Review*, 22(6), 641–657.
- Suunto. (2016). Suunto sports watches. Accessed December 2, 2016, from http://www.suunto.com/en-GB
- Suunto. (2017). Suunto Ambit3 Sport Sapphire. Accessed February 2, 2017, from http://www.suunto.com/en-GB/Products/sports-watches/Suunto-Ambit3-Sport/Suunto-Ambit3-Sport-Sapphire
- Thompson, C. (2004). Marketplace mythology and discourses of power. *Journal of Consumer Research*, 31(1), 162–180.
- Vannoy, S. A., & Palvia, P. (2010). The social influence model of technology adoption. Communications of the ACM, 53(6), 149–153.
- Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer acceptance and user of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157–178.
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2007). Measuring consumers' luxury value perception: A cross-cultural framework. *Academy of Marketing Science Review*, 11(7), 1–21.
- Yin, R. (2013). Case study research. Design and methods. Thousand Oaks: Sage.
- Zaltman, G. (1997). Rethinking market research: Putting people back in. Journal of Marketing Research, 34(4), 424–437.
- Zaltman, G., & Coulter, R. (1995). Seeing the voice of the customer: Metaphor-based advertising research. *Journal of Advertising Research*, 35(4), 35–51.

## Make It Happen: Marketing Processes for Competitive Market Positioning of Firms in Transitional Economy



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**Abstract** This paper presents some of the marketing processes, i.e. activities that firms in transitional economy can follow in the process of competitive market positioning. The main objective is to demonstrate that the practice of certain business processes, such as market orientation, market research, written marketing plans as a base for future business operations are correlated with creation of market positioning statements and thus increase the focus on market positioning in regards to competitors. This in addition, results in positive effects on profitability. Data are gathered through questionnaires and follow-up interviews. The results show that the analyzed processes have a positive outcome for firms in regards to competitive positioning. The creation of market positioning statement is found to be positively correlated with profitability. However, many of the firms in a transitional economy are slow in adapting to market changes, and have a selective approach to marketing activities. The most striking result is the more proactive approach of small and medium-sized enterprises in implementation of some of the marketing activities, like formal marketing planning and market research than large firms.

**Keywords** Domestic firms  $\cdot$  Transitional economy  $\cdot$  Market positioning  $\cdot$  Market orientation  $\cdot$  Formal marketing planning  $\cdot$  Market research

#### 1 Introduction

Truth is irrelevant and what matters are the perceptions that exist in the mind (Ries and Trout 2001). In other words, the human mind tends to accept only that which matches prior knowledge or experience. Some sources, such as Yankelovich media research company, state that the average media consumer is exposed to somewhere between 3000 and 20,000 promotional messages per day (Story 2007). The large

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volume of communication results in an activation of a crucial defense mechanism (Ries and Trout 2001): (1) The mind rejects information that it does not compute; (2) Accepts new information which matches its current state of mind; (3) Filters out everything else.

This situation makes the empty phrase "promotion (marketing) is a lie" seem as it is true and thus, makes the effort of successful placement of a new product on the market undeniably more difficult. This is even more so, for firms from transitional economies, since they still haven't shifted completely to marketing and market orientation in business operations, and as a result many of the firms are far behind in brand development, implementation of marketing strategy and formal planning (Davcev et al. 2017).

Most of the firms in the transitional economy included in this research i.e. Macedonia, as well as in many other transitional and non-transitional economies are in the category of micro, small and medium sized (European Commission 2017). Small and medium sized enterprises are considered as the pillars of economic growth, development and stability since the 1960s to date. They play important role in employment creation, development and innovation of goods and services, thus creating a better living standard in transitional and non-transitional economies. However, their hierarchical organization usually means that the central executive manager or owner has the first and the last word in implementation of the business activities—a truth that creates the risk of underestimating the importance of marketing activities. Moreover, research shows that in the case of small and medium sized firms, profitability can suffer when the owner is involved in making final decisions in different areas of the business, especially when making decisions about marketing activities, if he/she doesn't have knowledge in the area (Jovanov Marjanova 2013). Nevertheless, marketing activities are not reserved only for the large and prosperous, but on the contrary, are considered necessary also for small and medium-sized firms, in order to create new products, new segments and markets, to increase profitability and for overall development and growth.

The transition processes in transitional economies often result in firms with certain limitations in the business strategies, especially concerning their marketing strategy and activities (Davcev et.al. 2017) such as: (1) most of the firms never develop corporate philosophy nor corporate values, (2) vision and mission statements are rarely defined; situational analysis in not a part of the usual business activities, (3) market segmentation is implemented mostly by large firms. On the other side, research shows positive correlation among these activities and profitability. Kotler and Keller (2009) talk about the connection between business profitability and market orientation and research, branding and product innovation, marketing planning etc.

On the other side, in the over-communicated (brand) world it becomes increasingly important to succeed in implementing the principle "less is more" in a right way. One solution of the problem is development of a positioning strategy for the brand or the company, since it is the strategy that increases the competitive advantage through visibility and significant communication. The idea of market positioning arose in 1969th to help brands cut through the advertising clutter and reach the

target market that has the need, the interest, the means and the intention of buying the product, by increasing the chances of leaving an impression on them, through the promotional message at the right time and under the right circumstances.

Positioning is the perception of the target market for the product, brand or the company, that is created in the mind of the prospects in relation to the competitive products in the same category and therefore, it is expected for the brand to be compared and analyzed based on some or all of the elements of the marketing mix (product, price, place and promotion) (Lamb 2012). The main idea around positioning is to understand the perceptions of the target group as reality, and then use and restructure those perceptions to create the position you are prepared to stand for, in a process called "outside-in thinking". The positioning strategy can be described as a long term purposeful process or a branding plan for setting itself apart from the competitors in the crowded markets, through entering and staying in the consumer consciousness, by influencing the way the target audience perceives the brand. It is important to state that a position in the prospects minds for the brand will be created either by deliberate guided actions of the company, or it will happen organically by chance. Proactive positioning means a brand must develop a set of values to stand for on the long term. Consequently, a well planned positioning strategy is considered to be crucial for the longevity of the brand and the company. The positioning concept enables a selection between different alternatives when entering the market and thus, increases the competitive advantage of the company. For example, a company can choose one of the following approaches to positioning: Positioning against a competitor, within a category, on the base of a product benefit, according to product attribute, for usage occasion, along price lines, by cultural symbols (Belch et al. 2009). Positioning decisions are revolving around many different elements of the marketing mix—level of price, level of quality, level of service and degree of innovativeness (Hooley et.al. 1998). The positioning process includes several steps i.e. business actions in order to be implemented in a strategic manner (Ries and Trout 2001): development of a positioning idea; creating a positioning statement; competitor analysis; determination of the current position and control of the effectiveness of the chosen (winning) position. The development of a positioning idea includes answers to the questions like what does the company stands for, what problems is it solving for the target customers, why should they choose that specific business. Creating a positioning statement is the actual formulation of a written sentence about the positioning idea, based on carefully gathered market data, that will guide the key marketing and advertising decisions about the brand (identification of target a market—demographics, psychographics, buying behavior, inclusion of a promise—the main benefit of the brand for the target customers, give them a reason to believe through evidence). A clear positioning statement improves the consistency and the mutual support of the elements of the marketing program (Aaker and Shansby 1982). Competitor analysis should provide information about competitors' strengths and weaknesses, their marketing strategy—objectives, target groups, their promotional strategy and the media and communication channels they are using to transfer the message, positioning analysis. The determination of the current position of the brand means a clear understanding of the existing market position of the brand through market research, in order to make the needed changes. The control of the effectiveness of the chosen (winning) position can be completed with a unique testing model (questions about consumer needs, wants, preferences, feelings) based on market research activities and data gathering with qualitative and quantitative methodology and rating of the results against a set of criteria (does the position presents a clear picture of a brand different than the competitors, is it based on the gathered data, can the brand grow from that position, does it show the unique value, etc.).

The positioning strategy is a part of a broader set of planned marketing activities. Namely, positioning is one of the elements of the so-called STP marketing strategy, which includes three basic decision levels—segmentation, targeting and positioning (Moutinho 2000). Segmentation refers to dividing the market into segments of consumers that are different among segments, but with similar needs, wants, characteristics inside the segment). Targeting means choosing a specific (target) market segment that will be in the focus of the company operations and whose needs can be best met, while positioning stands for occupation of a specific distinctive position in the target prospects mind against all other competitors on the market. Moreover, the STP marketing strategy is a central part of the process of formal marketing planning and all of the abovementioned marketing activities and processes should be based on market research, in particular prior the beginning of the business operations (McDonald 2006; Blythe and Megicks 2010). Market research activities should provide information about the target market: who is the customer that the company can best serve, what are his needs, desires and attitudes in the product category, what are his feelings about the competitors products, what influences his buying decision, how much competition is there in the potential target market, who are the competitors, their strategies, etc.

In addition, some of the basic steps of development of the positioning strategy (market research, consumer analysis, competitor orientation and analysis) are also a vital part of market orientation, a term that represents "a set of processes touching on all aspects of the company-much more than the cliché getting close to the customer" (Shapiro 1988). Market orientation is a determination and commitment of the company management to acquire information about the markets and the people it serves, and to implement a high level of inter-functional coordination in all of the strategic and tactical decisions. Furthermore, the level of market orientation of a company should be connected to its competitive marketing plan and strategy and also, to its' levels of performance i.e. profitability. According to Shapiro (1988), when the implementers of market orientation also do the planning, the commitment is expected to be strong and clear. The discussion concerning the importance of adopting a market orientation in collaboration with market positioning strategies has gone on for years. However, research shows that on their own, market orientation and market positioning do not guarantee profitable firm performance unless they are employed and integrated both, on a long-term basis (Blankson et al. 2013).

This means that in today's crowded market place, positioning activities must be well—planned and in line with all other marketing and business activities. The process of developing a clear and competitive market position should include several

other business processes that precede the positioning strategy, such as: development of higher levels of market orientation (analysis of consumers, response to consumer demands, orientation toward competitors and inter—functional coordination), formal marketing planning and implementation of market research prior beginning of business activities. The company that is developing and implementing strategic business planning and is consistent in executing the strategy in accordance with higher market orientation levels can identify a potential unoccupied market position more easily and consequently develop a positioning strategy. The positioning concept can then be the blueprint for the design of the creative advertising assets and marketing materials (packaging, promotion, pricing, brand name, product improvements, website copy, customer service, and so on). A company that wants to be successful on the long run should not leave its market positioning to chance. The formation of an optimal positioning strategy will guide the focus and energize the advertising and marketing efforts of the brand, which as a result is expected to contribute to better overall performance and profitability.

Nevertheless, achieving the synergy between all of the marketing activities can be somewhat problematic, especially when we bear in mind the focus on short-term operational exigency of the firms, as well as the existing gap in research that hasn't clearly identified the relationship between the concepts of market orientation and market positioning. This paper contributes to the literature by evaluating the association between a set of these activities in firms in the context of transitional economy. The article sheds light on the relationships between market orientation and the intermediate business processes such as formal planning and market research on one side, and these intermediate processes and market positioning on the other side. Furthermore, the research proposes how market positioning meditates the relationship between market orientation and business profitability. These findings can be used to inspire changes and improvements in the education process, because marketing education can be employed as a way of improving firms' marketing practice.

Conducting the research in transitional economy, we provide an empirical testing ground to explore the effects of national environment of this specific country on business performance. According to the best of our knowledge, this is the first exploratory study of this kind for the Balkan region. However, we feel that additional research is needed in order to test the effect of joined marketing activities on business profitability in transition countries and explain some of the antecedents of the situation.

#### 2 Literature Review

The marketplace has become a battle ground where a company can win only if it is successful in combining the multiple sources of competitive advantage. Many theories have been developed analyzing the competitive advantage of firms (Morgan and Strong 2003). Most of the contributions are divided in three streams of research

associated with: competitive forces paradigm (Porter 1985), strategic conflict paradigm (Shapiro 1989), and resource-based paradigm (Penrose 1959; Wernerfelt 1984; Barney 1991). Among these, the resource based view has been the most dominant in explanations of firm level competitive phenomenon (Day 1994; Hooley et al. 1998, 2005).

This study is consistent with the resources-position-performance framework (Day and Wensley 1988; Hunt and Morgan 1995). Considering market orientation as a firm resource and positioning as a skill (implementation strategy), this study uses two classifications. We propose that resources and skills taken together can represent the ability of a business to do better or different than its competitors. What's more, superior skills and resources can be converted into positional advantages through the firm's knowledge integration processes (Day and Wensley 1988). Comparative advantage theory explains competition as the constant struggle between firms for a comparative advantage in resources that can lead to a position of competitive advantage, and thereby superior financial performance (Hunt and Morgan 1995). Competitive advantage in the marketing literature addresses the relative superiority in skills and resources i.e. positional superiority on the market (Day and Wensley 1983). Positional superiority is achieved through superior customer value or lower relative costs, which then should result in increased market share and profitability.

Firms, and especially small and medium-sized enterprises that come from transitional economies are operating on the global market alongside all other players (multi-national corporations), so their presence on the market also demands efficacious marketing of their products within those markets. However, research suggests that these firms from transitional economies face a shortage of managerial and marketing knowledge and skills (Davcev et al. 2017). Researchers have started employing the term entrepreneurial marketing, to distinguish it as a form of marketing activities for small and medium—sized enterprises. For example, Kraus et al. (2009) define the term as an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders, characterized by innovativeness, risk-taking, proactiveness, performed without resources currently controlled. Furthermore, Miles and Darroch (2006) state that entrepreneurial marketing consist of opportunity creation and/or discovery, evaluation and exploitation.

Nonetheless, many studies have examined the impact of different marketing activities on firms' performance, irrespective of size. Market orientation is considered to be a base for different marketing activities, since it revolves around a proactive search for market opportunities, thus enabling the future positioning of a company (Morgan and Strong 1998). Based on previous research, market orientation has been recognized as a source of competitive advantage and a key determinant of firms' performance, since these firms provide superior value and timely response to customers' needs and preferences (Narver and Slater 1990; Jaworski and Kohli 1993). Additionally, previously published research papers have broadly investigated market orientation and its relationship with business performance, and have provided evidence of a positive effect (Diamantopoulos and Hart 1993; Slater and

Narver 1994; Day 1994; Kirca et al. 2005; Jovanov Marjanova 2014). One of the main advantages of firms that are market oriented is the possibility to generate market knowledge through research and use it in creation of other business processes (marketing plans, positioning statements). According to Van Raaij and Stoelhorst (2008), the main concern of being market oriented is the formulation and implementation of different business processes.

In this regard, studies have presented a positive connection between market orientation and competitive marketing strategy (Morgan and Strong 1998). This competitive strategy should begin with timely diagnosis of the existing and future advantages of the business on the market (Day and Wensley 1988). Competitive marketing strategy is considered a crucial factor in small and medium—sized firms' overall performance (Jovanov Marjanova and Stojanovski 2012). Formal marketing planning in transitional economies was also found to be in a positive correlation with overall business performance of firms (Jovanov Marjanova et al. 2016). Additionally, positioning is considered to be an important element of a marketing plan, and in order to clearly determinate the value (product benefits, features, style, value for money) as part of their marketing plan, marketers need to understand customer needs and clearly identify how the firm's products or services are different from competitors' offerings.

What's more, market positioning is a concept that has become one of the fundamental components of marketing management (Hooley et al. 1998). Since the introduction of the concept in the beginning of the 1960s, some of the greatest marketing minds have considered market and product positioning to be the most important decision of the firm (Ogilvy 1963). The concept of positioning is well established among both advertisers and marketers because it is perceived to provide planners with valuable conceptual vehicle, which can be used to make various strategy techniques more meaningful and more productive (Maggard 1976). The significance of developing market orientation and positioning strategy for the overall success of a business has continuously received attention in the marketing literature (Day 1990; Deshpande et al. 1993; Hooley et al. 1998, 2004).

Research studies have demonstrated that the right positioning strategy at the right time can significantly help a brand build the right image in the mind of consumers (Sair 2014; Maggard 1976). Other studies indicate that a business can influence and change the positioning of the brand by manipulating different factors, and in that regard, also affect a consumer's attitude towards the brand. This is so, because a brand's position in a prospective consumer's mind is usually determined by the combined total of various product characteristics such as price, quality, durability, reliability, color, and flavor (Maggard 1976). Research on persons' attitudes implies that consumers place important weights on each of these product characteristics, and it becomes possible by using promotional efforts to realign the weights of these characteristics, which then leads to adjusting the position of a brand in the mind of the prospective consumer (Ray 1973).

Some evidence indicates a clear positive relationship between firm performance and clearly defined positioning activities in different industries and different settings (Kalafatis et al. 2000; Winston and Dadzie 2002; Blankson and Kalafatis 2004; Kim

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et al. 2008). Moreover, some authors suggest that the development of a clear market position involves some of the most significant marketing actions as a part of a broader plan of activities, and can't exist as an isolated competitive strategy (Deshpande and Farley 1998; Hooley and Greenley 2005). On one side, implementing higher levels of market orientation creates a commitment to continuous development of superior value (Kohli and Jaworski 1990; Narver and Slater 1990), but on the other side, market positioning derives its power from a concrete competitive, market-oriented plan.

However, the overall knowledge on the association between market orientation, market positioning and firms' performance is still far from conclusive. One of the main advantages of positioning strategies is that they help in securing preference for a firm's offering over competitors'. This can be observed as a synergetic effect between market orientation and market positioning. Still, more research is needed in order to analyze the subject further. This study proposes that in order to be successful on a long term, firms should try to grow on more different levels—resources (market orientation), skills (market positioning) and intermediate processes (development of formal marketing plans and market research) that can serve as a connection between the two.

### 3 Methodology and Hypotheses

The study presents the current state in regard to marketing activities of firms in a transitional economy, i.e. Republic of Macedonia. Due to the fact that the development of a clear market position involves some of the most significant marketing actions as a part of a broader plan of activities the research focuses on answering two questions: (1) The significance of certain marketing activities (market orientation, market research and formal marketing planning) i.e. their positive association with development of a positioning statement as a clear indicator of existing positioning strategy in the firm, and (2) The positive association of the positioning statement on business performance, i.e. profitability.

The methodology included quantitative and qualitative research methods and data was gathered from secondary and primary sources (structured questionnaires about attitudes measured on a 5—point Likert scale, and a follow—up interview with the managers/owners). The research was performed in 38 domestic firms from the production sector, with an adequate 38% response rate achieved after a reminder (Visser et al. 1996; Curtin et al. 2000; Scott et al. 2006; AAPOR 2008). The analysis is done with IBM SPSS19 on the basis of descriptive and deductive statistics. Business profitability was measured on a subjective scale, in order to minimize the possibility of a false answer, and because the scale has shown ahigh level of convergence with objective scales for measuring business performance (Dawes 1999).

Our research model (Fig. 1) is based on previously developed and widely used MKTOR (Narver and Slater 1990) and MARKOR (Kohli et al. 1993) scales for

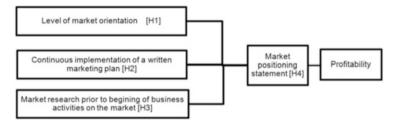


Fig. 1 Conceptual framework. Source: authors own study

measuring of market orientation and some additional variables that directly reveal the practice of key marketing activities: performing market research prior to beginning of business activities, implementation of formal (written) marketing plans and creation of market positioning statement.

Higher levels of market orientation should ensure that: the firms are developing and implementing consumer analysis; they have timely and appropriate reaction to consumer preferences; they are competitor oriented; they focus on practicing of inter-functional coordination or information sharing inside the firm. These activities are also considered to be at the core of the market positioning strategy. Thus, we can assume that higher levels of market orientation should lead to development of market positioning statement. As stated before in the literature review, the positioning strategy is a crucial part of the marketing plan, and therefore we believe that a firm that continuously develops written marketing plans as a base for future business operations should also develop a positioning statement as a key part of the positioning strategy. The positioning strategy of a firm is highly dependent of the market data and information about consumers, market trends etc. As a result, it is safe to think that implementation of market research before the beginning of business activities on the market should result in a creation of a clear positioning statement that will lead future market positioning decisions. Furthermore, since the positioning statement is a core element of the positioning strategy (which is positively associated with business performance), and it serves as a pathway for future competitive market positioning decisions, we propose that the created positioning statement as an indicator of existing positioning strategy in a firm is positively associated with profitability.

The aim of this study is to help the managers and owners of domestic firms in transitional economy to understand the benefits of these activities and to shift the mindset toward more proactive marketing approach, which should lead to development and growth of the firms. Based on the literature review and the aim of the paper, we test several hypotheses (by rejecting the opposite  $H_0$  hypothesis):

- 1. Higher level of market orientation is positively correlated with development of a positioning statement.
- 2. Continuous implementation of a written marketing plan is positively correlated with development of a positioning statement.

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3. Detailed market research prior to beginning of business activities on the market is positively correlated with development of a positioning statement.

4. Developed positioning statement is positively associated with profitability.

Data was collected from the managers of manufacturing firms through previous identification of a person in charge of the marketing function or a manager at a senior management level in each company or the owner of the firm. This was done in order to minimize the measurement errors through the use of a knowledgeable source. The use of one manager as a key informant is consistent with prior studies (Kumar et al. 1993; Han et al. 1998).

To test the hypotheses, correlation statistics, and simple regression analysis were conducted in order to determine the expected relationships between market orientation, formal planning, market research and market positioning statement on one side, and positioning statement and firms' performance on the other.

### 4 Findings and Discussion

The research was conducted in 38 firms from the production sector in Macedonia as a transitional economy. Since the focus of the research are domestic firms, more of the analyzed firms belong to SMEs (68.4%), while a smaller number are large firms (31.6%), which represents the real situation on the market where most of the domestic firms are small and medium-sized (Table 1). Size of firms is determined primarily by number of employees.

The results from Table 2 (Total) for profitability of the firms included in the research, show that most of these firms report moderately good profitability (31.6%), while a significant number also reported moderately bad profitability (26.3%). A smaller percent shows very good (15.8%) and extremely good profitability (10.5%).

When we analyze further, we can see that by firms' size, small and medium-sized enterprises demonstrate better profitability that large firms. That is, small firms report moderately good (25%), very good (25%) and extremely good (25%) profitability, while medium-sized firms show moderately good (28.6%), very good (28.6%) and extremely good (14.3%) profitability.

The primary research analyzed the practice of implementation of continuous, formal, i.e. written marketing plan as a part of the strategic business process in these

Frequency Percent Cumulative percent Valid 4 Micro 10.5 10.5 Small 8 21.1 31.6 Medium 14 36.8 68.4 12 100.0 Large 31.6 38 Total 100.0

Table 1 Size of the firms included in the study

Source: authors own study

			Bad	Moderately bad	Moderately good	Very good	Extremely good	Total
Size	Micro	Count	2	0	2	0	0	4
of firms		% within size of firms	50.0	0.0	50.0	0.0	0.0	100.0
	Small	Count	0	2	2	2	2	8
		% within size of firms	0.0	25.0	25.0	25.0	25.0	100.0
	Medium	Count	0	4	4	4	2	14
		% within size of firms	0.0	28.6	28.6	28.6	14.3	100.0
	Large	Count	4	4	4	0	0	12
		% within size of firms	33.3	33.3	33.3	0.0	0.0	100.0
Total		Count	6	10	12	6	4	38
		% within size of firms	15.8	26.3	31.6	15.8	10.5	100.0

**Table 2** Profitability of firms (by size, 2016 yr.)

firms. Consequently, the analysis measured the attitudes of the managers/owners about continuous implementation of a formal, i.e. written marketing plan as a base for future business operations, on a 5—point Likert scale (1—I totally disagree and 5—I totally agree). The descriptive statistics (Table 3) shows that most of managers disagree (39.5% cumulative percent) that they continuously implement written marketing plans as a base for future decisions, while other 31.6% (cumulative percent) agree that they run their business operations according to a written marketing plan. What's more, most of the firms that disagree with the statement that they continuously implement written marketing plans as a base for the business operations are large (41.6% cumulative percent), while small and medium-sized firms mostly agree with the statement, by 37.5% (cumulative percent) and 35.7% (cumulative percent) respectively. The results present an interesting situation, where small and medium-sized firms tend to use formal marketing planning more than large firms, which is somewhat surprising, bearing in mind that it is usually large firms that have the resources and the employees to implement marketing on a higher level.

In the same manner, we also analyzed the practice of implementation of detailed market research as a part of the business operations of these firms (Table 4). The results show that most of the firms agree and totally agree (by 32% and 21% respectively) that they implement detailed market research before the beginning of the business operations. Nevertheless, when we analyze the situation by size of firms, we can see that the firms that are more proactive in this manner are mainly

Table 3 Continuous implementation of a written marketing plan as a base for future business operations (by size of firms)

	•				•	•			
			NA	I totally	I	Nor agree nor	I	I totally	
			(no answer)	disagree	disagree	disagree	agree	agree	Total
Size of	Micro	Count	0	1	1	1	1	0	4
firms		% within size of firms	0.0	25.0	25.0	25.0	25.0	0.0	100.0
	Small	Count	1	0	2	2	1	2	8
		% within size of firms   12.5	12.5	0.0	25.0	25.0	12.5	25.0	100.0
	Medium	Count	1	0	9	2	4	1	14
		% within size of firms	7.1	0.0	42.9	14.3	28.6	7.1	100.0
	Large	Count	1	4	1	3	2	1	12
		% within size of firms 8.3	8.3	33.3	8.3	25.0	16.7	8.3	100.0
Total		Count	3	5	10	8	8	4	38
		% within size of firms 7.9	7.9	13.2	26.3	21.1	21.1	10.5	100.0

Source: authors own study

			I totally disagree	I disagree	Nor agree nor disagree	I agree	I totally agree	Total
Size	Micro	Count	2	0	2	0	0	4
of firms		% within size of firms	50.0	0.0	50.0	0.0	0.0	100.0
	Small	Count	0	0	2	2	4	8
		% within size of firms	0.0	0.0	25.0	25.0	50.0	100.0
	Medium	Count	0	2	2	6	4	14
		% within size of firms	0.0	14.3	14.3	42.9	28.6	100.0
	Large	Count	0	4	4	4	0	12
		% within size of firms	0.0	33.3	33.3	33.3	0.0	100.0
Total		Count	2	6	10	12	8	38
		% within size of firms	5	15.7	26.3	32	21	100.0

**Table 4** Implementation of detailed market research prior of business activities (by size)

small and medium—sized enterprises. Large firms have reported that they do not agree with the statement by 33.3%, which indicates that a third of these firms included in the research do not usually utilize this practice in their business activities. Again, we face an interesting situation where small and medium-sized enterprises seem to be more proactive in the use of this marketing activity than large firms. This indicates that the implementation of these activities (formal marketing planning and market research) could be dependent of firms' size, but more research is needed to analyze the antecedents of this situation.

In addition, regarding the implementation of market orientation, and as presented in Table 5, we can see that most of the firms included in the research have reported a certain level of practicing market orientation. By size, small and medium-sized enterprises are the ones that mostly agree, i.e. totally agree with the statements of implementation of market orientation activities (such as consumer analysis, response to consumer preferences, competitor analysis and internal information sharing) by 75% and 57.2% respectively. Also, 50% (cumulatively) of the large firms agree that they implement market orientation activities in their business operations. Nevertheless, we think that additional research is needed in order to inspect the gap in the business practices of the large firms, which tend to implement market orientation, but have reported lesser use of written marketing plan and market research prior business operations on the market.

 Table 5
 Implementation of market orientation activities (by size of firms)

			Nor agree nor	I	I totally	
			disagree	agree	agree	Total
Size of	Micro	Count	2	2	0	4
firms		% within size of firms	50.0	50.0	0.0	100.0
	Small	Count	2	0	6	8
		% within size of firms	25.0	0.0	75.0	100.0
	Medium	Count	4	2	8	14
		% within size of firms	28.6	14.3	57.2	100.0
	Large	Count	6	4	2	12
		% within size of firms	50.0	33.3	16.7	100.0
Total		Count	14	8	16	38
		% within size of firms	37	21	42	100.0

 Table 6 Created market positioning statement (by size of firms)

			I	Nor agree nor	I	I totally	T-4-1
			disagree	disagree	agree	agree	Total
Size of	Micro	Count	4	0	0	0	4
firms		% within size of firms	100.0	0.0	0.0	0.0	100.0
	Small	Count	0	0	2	6	8
		% within size of firms	0.0	0.0	25.0	75.0	100.0
	Medium	Count	0	0	12	2	14
		% within size of firms	0.0	0.0	85.7	14.3	100.0
	Large	Count	2	6	2	2	12
		% within size of firms	16.7	50.0	16.7	16.7	100.0
Total		Count	6	6	16	10	38
		% within size of firms	15.8	15.8	42.1	26.3	100.0

Source: authors own study

In order to acquire some knowledge about the practice of the positioning strategy, we analyzed if these firms have formulated a clear positioning statement as a part of their usual business activities and as a means to demonstrate their preferred market position. From Table 6 we can notice that small and medium-sized enterprises agree and totally agree that they have a formulated positioning statement, while only a third (cumulatively) of the large firms tend to agree with this statement. Again, we

Correlations		Created market positioning statement
Continuous implementation of a written marketing plan	Pearson correlation	0.411 <sup>a</sup>
	Sig. (2-tailed)	0.010
	N	38
Implementation of detailed market research prior to beginning of business activities	Pearson correlation	0.724 <sup>b</sup>
	Sig. (2-tailed)	0.000
	N	38
Implementation of market orientation activities	Pearson correlation	0.449 <sup>b</sup>
	Sig. (2-tailed)	0.005
	N	38

Table 7 Correlations between implementation of the analyzed marketing activities and market positioning statement

have the same situation where SMEs present their work as more marketing and market orientated in comparison to large firms. Is it possible that these large firms of the production sector are making more use of previous market and managerial knowledge, while the small and medium-sized enterprises are in a position where they have to find a way to be more competitive and thus implement more marketing activities into their business operations? We call for future research in this direction in order to be able to give some answers on the questions that arise from this study.

In addition, the deductive statistics looks at the relationship between implementation of the above mentioned marketing activities and the creation of clear market positioning statement on one, and the created market positioning statement and profitability on the other side. Pearson correlation (Table 7) shows positive and significant relation between all of the analyzed activities (Continuous implementation of a written marketing plan; Implementation of detailed market research prior to beginning of business activities; Implementation of market orientation activities) with the created market positioning statement. This means that the firms that implement these marketing activities as a part of the usual business operations (that are more proactive in regards to marketing) are more likely to have created a market positioning statement as a guide for future decisions on the market.

Also, the deductive statistics show a positive and significant correlation between the created market positioning statement and profitability (Table 8). This indicates that the firms that formulate this statement have a more clear direction for future business decisions regarding the chosen market and have a better chance at successful placement of the products on the market, which in turn can foster profitability.

<sup>&</sup>lt;sup>a</sup>Correlation is significant at the 0.05 level (2-tailed)

<sup>&</sup>lt;sup>b</sup>Correlation is significant at the 0.01 level (2-tailed)

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Table 8	Correlations between crea	ated market posit	ioning statement and profitability	y
			Created market magitianing	

Correlations		Created market positioning statement	Profitability
Created market positioning statement	Pearson correlation	1	0.570 <sup>a</sup>
	Sig. (2-tailed)		0.000
	N	38	38

Source: authors own study

<sup>a</sup>Correlation is significant at the 0.01 level (2-tailed)

**Table 9** Regression estimates (model 1)

	Dependent variable: profitability
Constant	1.374***
	(1.058)
Created market positioning statement	1.124***
	(0.270)
N	38
R square	0.325

Notes: \*\*\* represent significance level at 1% (Sig.  $0.000 < \alpha~0.01$ ,  $H_0$ : There is no impact on profitability, is rejected)

Source: authors own study

On the base of the positive correlation we have conducted a regression analysis, to testif the process of creation of market positioning statement has an effect on profitability, testing on the basis of simple linear regression. The results in Table 9 (according to the rule of decision-making:  $t > t_{df;\alpha}$ ) reveal that in the case of created market positioning statement, there is a direct positive effect on profitability.

On the base of the impact of the positioning statement on profitability, we can state that the owners of these firms should consider putting additional focus on creation of market positioning statement as a way to direct future business decisions concerning placement of products on the market more successfully.

### 5 Conclusions

This research on the business processes for competitive market positioning provides an insight into the current state of the business practices of domestic firms in a transitional economy from the Balkan region. The attitudes towards the implementation of the key marketing activities are mostly optimistic and it has a significant positive correlation with the creation of the positioning statement.

The results on the significant and positive impact of the created market positioning statement on profitability are in line with past research. These firms have a tendency of developing a more proactive approach toward marketing and the market

in general. This can be noticed from the results which show that around half of these firms implement some of the most important marketing activities such as: continuous formal planning, detailed market research and development of market orientation.

Contrasted to other studies for other countries, in the observed transitional country—Macedonia, there is a noticeable difference among business practices between firms by size, and the most surprising finding is the one which shows that large firms implement all of the analyzed marketing activities less than SMEs. This is surprising due to the fact that large firms are considered to be the ones that have more resources and means to implement marketing to a higher level than SMEs, and in this particular study it is not the case.

The results of this study provide valuable information for managerial decision making. The research presents evidence that these marketing processes (implementation of a written marketing plan, detailed market research prior business activities, implementation of market orientation) are positively correlated with the process of market positioning through the creation of the positioning statement, which is in turn considered to be the pathway to future decisions considering the chosen market. Moreover, the presented result of a direct effect of the created positioning statement on business profitability is an indicator that in order to boost business success on the market, the firms should adopt even a more proactive market—oriented mindset and develop their marketing abilities to a higher level. However, a more in-depth study of the reasons standing behind the differences among firms by size is required.

Since our sample comprises of firms of one particular production sector and given the scope of our research, the extension of conclusions to the general population is somewhat limited. However, this study indicates that the process of education could help in creating a beneficial climate for fostering entrepreneurs with a market-oriented mindset, especially among young people who should be the next generation managers and business owners. These findings are also important for policymakers in both transition and non-transition countries, especially when we take into consideration that we found the analyzed marketing activities to be positively correlated with development of a positioning statement, which is at the end positively associated with profitability. Policymakers would be well advised to pay more attention on developing strategies for promotion and education on marketing management at different levels in schools and universities.

Future research should include firms from different industry sectors, which would expand the characteristics of the sample and test these findings in a broader industry context. Also, future studies could include other measures, beside the usage of self-administered survey. Moreover, a longitudinal study would help in better understanding of the causality between these specific factors of influence and profitability. Since firms function as an open system, a further exploration of the economic and environmental context in these countries, may give a more clear perspective on the relationship between the above-mentioned factors and profitability.

This research shows that in the selected transitional country there is a tendency to implement certain marketing activities and that the idea of market positioning is familiar to the managers of the firms. However, there are still a number of obstacles to this process being effectively launched and realized to its' full potential. Finally,

more studies on the connection between business (marketing) processes and competitive market positioning and profitability should be undertaken. Higher levels of implementation of marketing activities might induce growth of the profitability and the firms in general and thus contribute in alleviating this burden to the national economies in the region.

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### References

- Aaker, D. A., & Shansby, J. (1982). Positioning your product. Business Horizons, 25, 56-62.
- American Association for Public Opinion Research (AAPOR). (2008). Response rates—an overview [online]. Accessed 20 May, 2017, from http://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Response-Rates-An-Overview.aspx
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17* (1), 99–120.
- Belch, G., Belch, M. A., Kerr, G., & Powell, I. (2009). Advertising and promotion management: An integrated marketing communication perspective. Sydney: McGraw-Hill.
- Blankson, C., & Kalafatis, S. P. (2004). The development and validation of a scale measuring consumer/customerderived generic typology of positioning strategies. *Journal of Marketing Management*, 20(1–2), 5–43.
- Blankson, C., Cowan, K., Crawford, J., Kalafatis, S., Singh, J., & Coffie, S. (2013). A review of the relationships and impact of market orientation and market positioning on organisational performance. *Journal of Strategic Marketing*, 21(6), 499–512.
- Blythe, J., & Megicks, P. (2010). *Marketing planning: Strategy, environment and context* (1st ed.). Harlow: Pearson Education.
- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the Index of consumer sentiment. *Public Opinion Quarterly*, 64(4), 413–428.
- Davcev, L., Jovanov Marjanova, T., & Sofijanova, E. (2017). Why can't we make it? The cardinal business sins of domestic companies in a transitional economy. In M. H. Bilgin, H. Danis, E. Demir, & U. Can (Eds.), Regional studies on economic growth, financial economics and management: Proceedings of the 19th Eurasia business and economics society conference (pp. 119–138). Basel: Springer.
- Dawes, J. (1999). The relationship between subjective and objective company performance measures in market orientation research: Further empirical evidence. *Marketing Bulletin*, 10, 65–75.
- Day, G. S. (1990). *Market driven strategy: Processes for creating value*. New York: The Free Press. Day, G. S. (1994). The capabilities of market driven organizations. *Journal of Marketing*, 58(4), 37–52.
- Day, G. S., & Wensley, R. (1983). Marketing theory with a strategic orientation. *Journal of Marketing*, 47, 79–89.
- Day, G. S., & Wensley, R. (1988). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing*, 52, 1–20.
- Deshpande, R., & Farley, J. (1998). Measuring market orientation: Generalization and synthesis. *Journal of Market-Focused Management*, 2(3), 213–232.
- Deshpande, R., Farley, J., & Webster, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing*, 57(1), 23–37.

- Diamantopoulos, A., & Hart, S. (1993). Linking market orientation and company performance: Preliminary evidence on Kohli and Jaworski's framework. *Journal of Strategic Marketing*, 1(2), 93–121.
- European Commission (2017). What is an SME? [online]. Accessed May 11, 2017, from https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\_en
- Han, J. K., Kim, N., & Srivastava, K. (1998). Market orientation and organizational performance: is innovation a missing link? *Journal of Marketing*, 62(4), 30–45.
- Hooley, G., & Greenley, G. (2005). The resource underpinnings of competitive positions. *Journal of Strategic Marketing*, 13(2), 93–116.
- Hooley, G., Broderick, A., & Möller, K. (1998). Competitive positioning and the resource-based view of the firm. *Journal of Strategic Marketing*, 6(2), 97–116.
- Hooley, G. J., Saunders, J. A., & Piercy, N. (2004). *Marketing strategy and competitive positioning* (3rd ed.). Harlow: Pearson Education.
- Hooley, G. J., Greenly, G. E., Cadogan, J. W., & Fahy, J. (2005). The performance impact of marketing resources. *Journal of Business Research*, 58(1), 18–27.
- Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. *Journal of Marketing*, 59, 1–15.
- Jaworski, B., & Kohli, A. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53–70.
- Jovanov Marjanova, T. (2013). Market orientation, marketing strategy and plan basic business steps for successful competitive positioning of the SMEs on the market with a special focus on the confectionary industry and market in Republic of Macedonia. PhD Thesis, University Ss. Cyril and Methodius- Skopje, Faculty of Economics, Macedonia.
- Jovanov Marjanova, T. (2014). *Market orientation and business performance: Through the prism of Macedonian SMEs*. In Researching economic development and entrepreneurship in transition economies. Proceedings of the 3rd International REDETE Conference (pp. 642–652). Banja Luka: Faculty of Economics.
- Jovanov Marjanova, T. & Stojanovski, M. (2012). Marketing knowledge and strategy for SMEs: Can they live without it? In *Reengineering and entrepreneurship under the contemporary conditions of enterprise business* (pp. 131–143). https://eprints.ugd.edu.mk/2084/
- Jovanov Marjanova, T., Temjanovski, R., & Ristevska-Jovanovska, S. (2016). Formal marketing planning and performance the case of transitional economy. In M. H. Bilgin, H. Danis, E. Demir, & U. Can (Eds.), Business challenges in the changing economic landscape: Proceedings of the 14th Eurasia business and economics society conference (Vol. 2, pp. 277–292). Basel: Springer.
- Kalafatis, S. P., Tsogas, M., & Blankson, C. (2000). Positioning strategies in business markets. *Journal of Business and Industrial Marketing*, 15(6), 416–413.
- Kim, K. S., Knotts, T. L., & Jones, S. C. (2008). Characterizing viability of small manufacturing enterprises (SME) in the market. *Expert Systems with Applications*, 34(1), 128–134.
- Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytical review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69, 24–41.
- Kohli, A., & Jaworski, B. (1990). Market orientation: The construct, research propositions and managerial implications. *Journal of Marketing*, 54(2), 1–18.
- Kohli, A., Jaworski, B., & Kumar, A. (1993). MARKOR: A measure of market orientation. *Journal of Marketing Research*, 30(4), 467–477.
- Kotler, P., & Keller, K. L. (2009). Marketing management (13th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Kraus, S., Harms, R., & Fink, M. (2009). Entrepreneurial marketing: Moving beyond marketing in new ventures. *International Journal of Entrepreneurship and Innovation Management*, 11(1), 19–34.
- Kumar, N., Stern, L. W., & Anderson, J. C. (1993). Conducting interorganizational research using key informants. *The Academy of Management Journal*, *36*(6), 1633–1651.

Lamb, C. (2012). *Essentials of marketing* (7th ed.). Mason, OH: South-Western Cengage Learning. Maggard, J. P. (1976). Positioning revisited. *Journal of Marketing*, 40(1), 63–66.

- McDonald, H. B. M. (2006). Strategic marketing planning: Theory and practice. *The Marketing Review*, 6, 375–418.
- Miles, M. P., & Darroch, J. (2006). Large firms, entrepreneurial marketing processes, and the cycle of competitive advantage. *European Journal of Marketing*, 40(5/6), 485–501.
- Morgan, R. E., & Strong, C. A. (1998). Market orientation and dimensions of strategic orientation. *European Journal of Marketing*, 32(11/12), 1051–1073.
- Morgan, R. E., & Strong, C. A. (2003). Business performance and dimensions of strategic orientation. *Journal of Business Research*, 56(3), 163–176.
- Moutinho, L. (2000). Segmentation, targeting, positioning and strategic marketing. In L. Moutinho (Ed.), *Strategic management in tourism* (pp. 121–166). London: CAB International.
- Narver, J., & Slater, S. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35.
- Ogilvy, D. (1963). Confessions of an advertising man (1st ed.). New York: Atheneum.
- Penrose, E. T. (1959). The theory of the growth of the firm. Oxford: Oxford University Press.
- Porter, M. E. (1985). Competitive advantage. New York: Free Press.
- Ray, M. L. (1973). A decision sequence analysis of developments in marketing communication. *Journal of Marketing*, *37*(1), 29–38.
- Ries, A., & Trout, J. (2001). Positioning: The battle for your mind. New York: McGraw-Hill.
- Sair, S. A. (2014). Consumer psyche and positioning strategies. *Pakistan Journal of Commerce and Social Sciences*, 8(1), 58–73.
- Scott, K., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opinion Quarterly*, 70 (5), 759–779.
- Shapiro, P. B. (1988). What the hell is "Market Oriented"? *Harvard Business Review* [online]. Accessed May 13, 2017, from https://hbr.org/1988/11/what-the-hell-is-market-oriented
- Shapiro, C. (1989). The theory of business strategy. *The RAND Journal of Economics*, 20(1), 125–137.
- Slater, S., & Narver, J. C. (1994). Does competitive environment moderate the market-orientation-performance relationship? *Journal of Marketing*, 58, 46–55.
- Story, L. (2007). Anywhere the eye can see, it's likely to see an Ad. *The New York Times* [online]. Accessed June 29, 2017, from http://www.nytimes.com/2007/01/15/business/media/15every where.html?pagewanted=all&\_r=1
- Van Raaij, E. M., & Stoelhorst, J. W. (2008). The Implementation of market orientation. European Journal of Marketing, 42(11/12), 1265–1293.
- Visser, P. S., Krosnick, J. A., Marquette, J., & Curtin, M. (1996). Mail surveys for election forecasting? An evaluation of the Colombia dispatch poll. *Public Opinion Quarterly*, 60(2), 181–227.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Winston, E., & Dadzie, K. Q. (2002). Market orientation of Nigerian and Kenyan firms: The role of top managers. *Journal of Business and Industrial Marketing*, 17(6), 471–480.

# Do Consumers of Products and Services Perceive the COO Effect in a Multidimensional Way? A Polish-Lithuanian Comparison



Monika Boguszewicz-Kreft, Katarzyna Sokołowska, Ewa Magier-Łakomy, and Brigita Janiūnaitė

**Abstract** So far, it has not been explicitly decided whether the country of origin (COO) effect comes as a one- or multi-dimensional phenomenon. The fundamental aim of the presented research study is to answer that question. Hence, two hypotheses have been tested: (1) the country of origin of products and services affects their assessment; (2) there are some differences in the assessment of the particular dimensions of the country of origin of products and services. The data collected from 192 Lithuanian and Polish respondents during a questionnaire survey have been analyzed with the use of a linear mixed model. The results indicate that the country of origin of products and services affects their assessment, and it gives more differentiation to the assessment of the offer than the country of origin of respondents and the COO dimensions. It has been confirmed that there are statistically significant differences between the assessments of the dimensions, depending on the country of origin of the offer. The results of the discussed research may find their practical application during the development of marketing programs which are dedicated to foreign markets.

**Keywords** Country-of-origin (COO) effect · The dimensions of the COO effect · Lithuania · Poland

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### 1 Introduction

The country of origin (COO) effect is defined as the influence exerted by the image of a specific country on the assessment of products or brands which come from that country (Figiel 2004) and also consumers' attitude and behavior which result from such an assessment (Sikora 2008; Balabanis and Diamantopoulos 2011). Most studies on the COO effect refer to material products, whereas the mechanisms of the discussed phenomenon in services have been scarcely studied so far (Ahmed et al. 2002; Chattalas et al. 2008; d'Astous et al. 2008; Boguszewicz-Kreft 2014). Such a situation can be explained with the fact that the value of international trade in services is considerably lower than the value of international trade in products (e.g. in the member states of the European Union it is two, up to three, times lower (Eurostat 2013). It results from difficulties in the distribution of intangible goods, such as services, and from legal barriers which are applied to protect home markets. Technological advancement and liberalization of trade contribute to a dynamic development of international exchange of services and this fact, in turn, results in the need of intensified research on the discussed phenomena.

We have incorporated both material products and services in order to focus only on services in further analysis. The discussed research project specifically refers to the question of the multi-dimensional character of the COO effect, which has not been explicitly answered so far. The research study involves the following research questions:

- 1. Are there any differences in the global assessment of products and services provided in Europe, depending on the country of origin of products and services?
- 2. Are there any differences in the assessment of particular dimensions of the COO, depending on the country of origin of products and services?

The research survey has been carried out in Poland and Lithuania. So far, a scarce number of studies have discussed the area of Central and Eastern Europe and the comparison between them. The results of the research may find their practical application during the development of marketing programs oriented towards foreign markets. The article is started with a review of literature on the COO effect in marketing and the problem of its multi-dimensional nature. The next part of the article is focused on the research method and the actual research results. Finally, the conclusions and limitations are presented.

## 2 The COO Effect in International Marketing

Since the moment of its introduction into the scientific discourse by Schooler (1965), the phenomenon of the COO effect has been the subject of interest for fifty years (for relevant literature reviews, see e.g.: Bikely and Nes 1982; Al-Sulaiti and Baker 1998; Peterson and Jolibert 1995; Javalgi et al. 2001; Pharr 2005;

Rezvani et al. 2012; Saran and Gupta 2012). Some studies show that the image of a COO affects the processes of perception, assessment and decisions made by consumers (Rezvani et al. 2012). The research has been carried out on the COO impact on the processes related to the assessment of product value and quality, perceived purchase risk, purchase intentions and decisions, tendencies to pay a particular price. The research has been carried out with the consideration of a number of features, including various products, methods and variables (Peterson and Jolibert 1995). It has been indicated that the identification of the COO by consumers is sometimes inapt (Balabanis and Diamantopoulos 2008, 2011; Lianxi et al. 2010; Melnyk et al. 2012; Martin and Cerviño 2011), and it has a subjective and involuntary character (Rezvani et al. 2012).

A number of research studies has been also carried out on the factors which affect the COO and which can be divided into the factors related to the purchasers' affiliation and to the product (referred to as informative ones) (Ahmed et al. 2002). Based on an extensive review of literature, Pharr (2005) divides the first group into endogenous factors (measurable features of consumers, including cultural factors, such as aversion towards a particular country, stereotypes, ethnocentrism, dimensions of nation cultures according to Hofstede, personal cultural dimensions (Sharma 2011) and demographic factors) and exogenous factors (the level of economic development of the consumers' country). Pharr (2005) also divides informative factors into two group: *intrinsic cues* which refer to the functionality of products and *extrinsic cues* which do not directly affect the functionality of products (COO, brand and seller's reputation, promotional communication, guarantees and prices). *Intrinsic cues* and individual factors related to consumers (the context of consumption (Sharma 2011), the level and type of commitment, familiarity with the product and its importance come as the COO moderators as well.

### 3 The COO Effect in Services

The growing significance of international service exchange is followed by some more intensified research on the COO in services, however still scarce (Ahmed et al. 2002; Chattalas et al. 2008; d'Astous et al. 2008; Boguszewicz-Kreft 2014). The conclusions drawn from such research studies confirm a number of results referring to the impact of the COO effect on material products: the image of the origin country comes as a significant informative indicator for consumers (Ahmed et al. 2002), it affects the assessment of quality (Wong and Folkes 2008), purchase risk (Michaelis et al. 2008) and purchase intentions (Harrison-Walker 1995; Berentzen et al. 2008; Khare and Popovich 2010; Bose and Ponnam 2011; Morrish and Lee 2011). The research shows the problematic proper identification of the COO as well (Paswan and Sharma 2004; Sharma et al. 2009; Nicolescu 2012). Considering services, consumers also prefer (Javalgi et al. 2001): the offers coming from their home country, offers from the countries characterized by a smaller cultural distance

(d'Astous et al. 2008; Bruning and Saqib 2013) and from the countries which are more developed in terms of economy.

### 4 The Dimensions of the COO Effect

The current research has not provided a clear answer to the question whether the COO effect comes as a unidimensional phenomenon or as a more complex one. Historically, at first it used to be viewed as a monolithic category (e.g. Hong and Wyer 1989). However, with time there have appeared other propositions referring to the COO dimensions (a review of the research methods applied for the research on the COO are to be found in Bose and Ponnam 2011). Roth and Romeo (1992) provide their synthesis, and as a result, a model has been developed which consists of the following dimensions: (1) innovativeness (the use of technological advance and new technologies), (2) design (appearance, colors, style, variety), (3) prestige (exclusiveness, brand reputation, status) and (4) workmanship (durability, reliability, artistry, quality). The model has been then modified by Bose and Ponnam (2011) for the requirements of the research on the COO effect in entertainment services.

We provide further adaptation of the above-mentioned models, aiming at the identification of a set of attributes that is universal enough to be suitable for the research on the COO in broadly understood services and cohesive with the prototype in order to make comparisons. As a result, four COO dimensions in services have been suggested:

- 1. Innovativeness—the use of advanced technology and the latest knowledge,
- 2. Diversity—wide range, variety, and attractiveness of an offer,
- 3. Prestige—brand name reputation, status, exclusivity,
- 4. Quality—professionalism, durability, reliability.

# 5 Instrument, Sampling Procedure, Sample Characteristics and Methodology

The auditorium survey research involves a questionnaire form based on the one applied by Roth and Romeo (1992), however there are also four dimensions in it, which have been modified by us (Innovativeness Diversity, Prestige, Quality), followed by their description. The respondents have been asked to assess products and services from the selected European countries, in accordance with the abovementioned dimensions, with the use of a six-grade scale, where 1 is the lowest score and 6 is the highest one. The study was conducted in 2015. The respondents have been given their questionnaire forms in their native languages, and their participation in the survey has been voluntary and anonymous. Response rate was 100%. There

		Age		Gender <sup>a</sup>	
Respondents	Number of respondents	Mean	Std. deviation	Women	Men
Polish	127	23.43	6.51	59	46
Lithuanian	65	23.02	6.60	20	20
Total	192	23.22	6.55	79	66

**Table 1** Characteristics of respondents participating in the research

have been 192 participants—Polish and Lithuanian students of major study courses in economics. Their characteristics are presented in Table 1.

As each person rated products and services coming from 9 countries in terms of the 4 dimensions so 6912 measurements were received. Following the elimination of 23 measurements with extensive missing data, 6889 measurements were used for analysis. The article presents an analysis of the impact exerted by the COO of products and services (the offer) on the variance of the *evaluation of products and services* dependent variable.

The following hypothesis has been tested:

H<sub>1</sub>: There are differences in the evaluation of an offer of products and services coming from various countries.

H<sub>2</sub>: There are differences in the evaluation of the particular dimensions of the COO of the offer of products and services.

As a starting point for the analysis, the following models (discussed in details in: Boguszewicz-Kreft et al. 2016) were used: Model 0 (which includes the constant only) and Model 1 (which includes the COO dimension effect). Model 1 takes the following theoretical form:

$$O_{ii} = \alpha_0 + \alpha_1 di v_{ii} + \alpha_2 i n_{ii} + \alpha_3 qual_{ii} + b_{0i} + \varepsilon_{ii} \quad (j = 1, ..., 192),$$
 (1)

where

 $O_{ij}$ —the ith evaluation of the offer (of products and services) ( $i=1,\ldots,6889,i$ —the number of measurements) in the selected country, declared by the jth consumer ( $j=1,\ldots,192$ )

 $div_{ij}$ ,  $in_{ij}$ ,  $qual_{ij}$ —the 0–1 variables which take the value 1 when the jth respondent assesses subsequently: Diversity, Innovativeness, Quality and the value 0 in the case when the respondent evaluates Prestige.

$$\varepsilon_{ij}$$
—random disturbance,  $\varepsilon_{ij}$   $N(0, \sigma_0^2)$   $b_{0j}$ —random effect,  $b_{0j}$   $N(0, \sigma_{kons}^2)$ 

The above-presented model is a mixed linear model in which the consumer effect is considered as the random effect. The choice of the model results from the fact that the evaluation of the offer has been measured several times for each consumer, hence it has been necessary to provide for a similarity in the measurements coming from

<sup>&</sup>lt;sup>a</sup>The total number of women and men does not coincide with the general number of participants due to the lack of gender information in several questionnaires

the same respondent. The structural parameters of the model are estimated with the method of maximum likelihood, because the use of an LRT test to analyze the significance of the parameters of fixed effects requires application of that method.

In order to test hypothesis 1, the parameters of Model 2 have been estimated, where next to the COO dimension effect (which has been added to Model 1) another effect has been added, namely: the effect of the evaluated country:

$$O_{ij} = \alpha_0 + \alpha_1 div_{ij} + \alpha_2 in_{ij} + \alpha_3 qual_{ij} + \beta_1 Fra_{ij} + \beta_2 Hisz_{ij} + \beta_3 Niem_{ij}$$

$$+ \beta_4 Litw_{ij} + \beta_5 Szw_{ij} + \beta_6 Wee_{ij} + \beta_7 UK_{ij} + \beta_8 Wel_{ij} + b_{0j}$$

$$+ \varepsilon_{ii} \quad (i = 1, \dots, 6889; j = 1, \dots, 192)$$

$$(2)$$

where:

Fra<sub>ij</sub>—a variable 0–1 which takes value 1 when the jth respondent assesses an offer from France, and value 0 in any other cases (when the respondent assesses offers from other countries); other variables of the equation have been constructed in a similar way.

The number of variables indicating countries is lower than the number of countries by 1, otherwise the variables would be linearly dependent. The omitted variable comes as a reference group, the estimates of the model parameters for this group are obtained by putting 0 value into the places of all the 0–1 variables which designate the evaluated countries. The choice of the reference group is arbitrary. The authors have chosen Poland as a reference group.

In order to test the hypothesis 2, the parameters of Model 3 have been estimated, with an additional effect of interaction between the COO dimension and the evaluated country:

$$O_{j} = \alpha_{0} + \alpha_{1}div_{j} + \alpha_{2}in_{j} + \alpha_{3}qual_{j} + \beta_{1}Fra_{j} + \beta_{2}Hisz_{j}$$

$$+ \beta_{3}Niem_{j} + \beta_{4}Litw_{j} + \beta_{5}Szw_{j} + \beta_{6}Wee_{j} + \beta_{7}UK_{j}$$

$$+ \beta_{8}Wtt_{j} + \gamma_{11}div_{j}Fra_{j} + \gamma_{12}div_{j}Hisz_{j} + \gamma_{13}div_{j}Niem_{j}$$

$$+ \gamma_{14}div_{j}Litw_{j} + \gamma_{15}div_{j}Szw_{j} + \gamma_{16}div_{j}Wee_{j}$$

$$+ \gamma_{17}div_{j}UK_{j} + \gamma_{18}div_{j}Wtt_{j} + \gamma_{21}in_{j}Fra_{j} + \gamma_{22}in_{j}Hisz_{j}$$

$$+ \gamma_{23}in_{j}Niem_{j} + \gamma_{24}in_{j}Litw_{j} + \gamma_{25}in_{j}Szw_{j} + \gamma_{26}in_{j}Wee_{j}$$

$$+ \gamma_{27}in_{j}UK_{j} + \gamma_{28}in_{j}Wtt_{j} + \gamma_{31}qual_{j}Fra_{j} + \gamma_{32}qual_{j}Hisz_{j}$$

$$+ \gamma_{33}qual_{j}Niem_{j} + \gamma_{34}qual_{j}Litw_{j} + \gamma_{35}qual_{j}Szw_{j}$$

$$+ \gamma_{36}qual_{j}Wee_{j} + \gamma_{37}qual_{j}UK_{j} + \gamma_{38}qual_{j}Wtt_{j}$$

$$+ b_{0j} + \varepsilon_{j} \quad (j = 1, ..., 192)$$

$$(3)$$

In the model the i subscript, which has been applied to number the subsequent observations, has been omitted in order to shorten the notation.

Parameter	Model 0 <sup>a</sup>	Model 1 <sup>a</sup>
Estimates of fixed effects		
Intercept	4.0906***	4.1414***
	(113.944)	(94.986)
[Evaluated COO's dimension = Diversity]	_	-0.0320
		(0.790)
[Evaluated COO's dimension = Innovativeness]	_	-0.1073***
		(2.649)
[Evaluated COO's dimension = Quality]	_	-0.0638
		(1.575)
[Evaluated COO's dimension = Prestige]	_	$0_{\rm p}$
Estimates of covariance parameters		
Residual $\hat{\sigma}_0^2$	1.4108***	1.4092***
	(57.819)	(57.754)
Intercept [subject = person id] Variance $\hat{\sigma}_{consumer}^2$	0.2076***	0.2075***
L J Consumer	(8.238)	(8.234)

Table 2 Estimates of fixed effects and covariance parameters for model 0 and model 1

t-values are in parentheses

### 6 Analyses and Results of the Survey Research

The impact of the dimensions of the COO effect on the intra-personal variance of the evaluation of products and services dependent variable, and the impact of the consumers' COO effect on the inter-personal variance of that variable were analyzed in our previous article (Boguszewicz-Kreft et al. 2016). These predicators indicate respectively 0.11% and 4.6% of the variance of the dependent variable, hence the explanation level of the variance by these variables proves to be minor. However, the introduction of the respondents' COO as a independent variable and the interaction of that variable with the COO dimension variable indicates that respondents should not be considered as one homogenous community. The model takes in consideration the fact that some assessments have been provided by the Poles and some by the Lithuanians, and that information has allowed the authors to indicate the difference between the COO dimensions (a significant difference between the quality variable and the prestige variable), which does not appear in the model without the consumers' COO variable (see: model 1 in Table 2).

First, the hypothesis 1 has been tested. When two effects—namely: the evaluated COO dimension and the evaluated country—are incorporated into the model, then both effects turn out to be significant (Table 3), although the COO dimension effect appears to be on the verge of the significance level (p=0.053) when it is the only independent variable in the model—as it has been proved in the previous article.

The impact of the evaluated country effect has been calculated in accordance with the following equation:

<sup>\*\*\*, \*\*,</sup> and \*represent the significance levels at 1%, 5% and 10% levels, respectively

<sup>&</sup>lt;sup>a</sup>Dependent variable: evaluation of products and services

<sup>&</sup>lt;sup>b</sup>This parameter is set to zero because it is redundant

Effect	Degrees of freedom numerator	Degrees of freedom denominator	F value	p
Intercept	1	192.058	12,995.173	0.000
COO's dimension	3	6697.979	4.159	0.006
The evaluated country	8	6697.211	509.648	0.000

Table 3 Type III tests of the fixed effect for Model 2

The degrees of freedom, F and p values for the factors included in the generalized linear mixed model which has been used to analyze the evaluation of products and services

Dependent variable: the evaluation of an offer

$$R_1^2 = \frac{\hat{\sigma}_0^2 basic\ model - \hat{\sigma}_0^2 evaluated\ model}{\hat{\sigma}_0^2 basic\ model}, \tag{4}$$

where Model 1 has been assumed as the basic model, it is 0.60884, which means that the model, in which the evaluation of an offer linearly depends on the evaluated country, explains 60.88% of intra-personal variability of results—that is considerably more than the COO dimension. The obtained estimates of the parameters of Model 2 (Table 4) again indicate that there are significant differences in the evaluation: between Innovativeness and Quality and Prestige. A country which is the most similar to Poland in terms of products and service evaluation is Hungary; other countries are significantly different from Poland. Germany obtains the highest evaluation and Lithuania—the lowest.

In order to test the hypothesis 2 the parameters of Model 3 have been estimated. The effect of the evaluated COO's dimension as well as the effect of the evaluated country and the interaction between these effects have turned out to be significant (Table 5).

The addition of the interaction effect contributes to the explanation of 2.37% of intra-personal variability of results. In order to facilitate the interpretation of the obtained results in the Appendix, a table with the interpretation of the parameters characterizing Model 3 has been provided.

Based on the obtained estimates of the parameters of Model 3 (Table 6), it is possible to draw the following conclusions:

- 1. There are significant differences between the evaluation of Diversity and Quality and the evaluation of Prestige for the offer from Poland.
- 2. The evaluation of the offer in terms of Prestige is different for all the countries when compared to Poland, except for Hungary. The most prestigious products and services come from Germany and the least prestigious—from Lithuania.
- The differences between Prestige and Diversity for Poland and Prestige and Diversity for other countries are significant in each case, and they are smaller than for Poland.

**Table 4** Estimates of fixed effects and covariance parameters for Model 2

Parameter	Model 2 <sup>a</sup>
Constant	3.4323***
	(66.214)
[The evaluated COO's dimension = Diversity]	-0.0309
	(0.967)
[The evaluated COO's dimension = Innovativeness]	-0.1076***
	(3.368)
[The evaluated COO's dimension = Quality]	-0.0634**
	(1.985)
[The evaluated COO's dimension = Prestige]	$0_{\rm p}$
[The evaluated country = France]	1.0184***
•	(21.302)
[The evaluated country = Spain]	0.4421***
, , ,	(9.241)
[The evaluated country = Lithuania]	-0.3700***
	(7.737)
[The evaluated country = Germany]	1.8828***
	(39.383)
[The evaluated country = Sweden]	1.3081***
	(27.353)
[The evaluated country = Hungary]	-0.0725
	(1.512)
[The evaluated country = Great Britain]	1.4027***
	(29.331)
[The evaluated country = Italy]	0.7590***
	(15.865)
[The evaluated country = Poland]	$0_{\rm p}$
Residual $\hat{\sigma}_0^2$	0.8759***
0	(58.007)
Intercept [subject = person id] Variance $\hat{\sigma}_{consumer}^2$	0.2227***
consumer	(8.837)

t-values are in parentheses

- 4. The differences between Prestige and Innovativeness for Poland and Prestige and Innovativeness for other countries are significant for France, Spain and Italy—for these countries the differences are smaller than for Poland.
- 5. The differences between Prestige and Quality for Poland and Prestige and Quality for other countries are significant for France, Spain, Great Britain and Italy—for these countries the differences are smaller than for Poland.

In order to evaluate the significance of the added fixed effects, a likelihood ratio test (LRT) has been applied, with the use of the following equation:

<sup>\*\*\*, \*\*,</sup> and \* represent the significance levels at 1%, 5% and 10% levels, respectively

<sup>&</sup>lt;sup>a</sup>Dependent variable: the evaluation of an offer

<sup>&</sup>lt;sup>b</sup>This parameter is set to zero because it is redundant

	Degrees of freedom	Degrees of freedom		
Effect	numerator	denominator	F value	p
Intercept	1	192.057	12,993.671	0.000
COO's dimension	3	6697.958	4.252	0.005
Evaluated country	8	6697.206	522.251	0.000
Evaluated COO's dimension × evaluated country	24	6697.104	6.761	0.000

Table 5 Type III tests of the fixed effect for Model 3

The degrees of freedom, F and p values for the factors included in the generalized linear mixed model which has been used to analyze the evaluation of products and services

Dependent variable: the evaluation of an offer

$$LRT = -2\ln L_b - (-2\ln L_t)^{\sim} \chi_{df}^2$$
 (5)

where  $L_t$ ,  $L_b$  refer respectively to the value of the likelihood function of the full model and the value of the likelihood function of the nested model; df represents the degrees of freedom which are defined as the difference between the number of the parameters in the full model and in the nested model. If the value of the LRT statistics is higher than the  $\chi^2_{df}$  value, then the zero hypothesis (claiming that the analyzed effect is insignificant) is rejected.

The obtained results confirm the statement that the COO dimension should not be analyzed alone as a factor which differentiates the evaluation of an offer, without any consideration of the countries which evaluated products and services come from (Table 7). It turns out that, depending on the evaluated country, various COO dimensions might differ from each other or they might be evaluated as similar. The introduction of the COO dimension effect as the only element to the model results in the fact that the difference in the -2 likelihood logarithm criterion is on the verge of statistical significance for Model 1 when compared to Model 0. Model 2, which contains the country of origin of products and services effect, fits considerably better to the data in comparison to Model 1, whereas Model 3, which contains the effect of the interaction between the offer's COO variable and the COO dimension variable fits considerably better to the data in comparison to Model 2. The significance of the interaction effect proves the fact that the size of the differences between the dimensions is affected by the country which offers the analyzed products and service. The reduction of the lack-of-fit for Model 2 in comparison to Model 1 is significant for p = 0.000 when Model 2 contains the effect of the COO of an offer, and it is significant for p = 0.006 when Model 2 contains the effect of the COO of a respondent (see: Boguszewicz-Kreft et al. 2016).

Table 6 Estimates of the fixed effects and covariance parameters for Model 3

Parameter	Model 3 <sup>a</sup>
Constant	3.2040***
	(42.663)
[Evaluated COO dimension = Diversity]	0.5147***
	(5.447)
[Evaluated COO dimension = Innovativeness]	0.0241
	(0.255)
[Evaluated COO's dimension = Quality]	0.1710*
	(1.810)
[Evaluated COO's dimension = Prestige]	0 <sub>p</sub>
[The evaluated country = France]	1.4136***
	(14.943)
[The evaluated country = Spain]	0.8115***
	(8.578)
[The evaluated country = Lithuania]	-0.3094***
	(-3.264)
[The evaluated country = $Germany$ ]	2.1780***
	(23.023)
[The evaluated country $=$ Sweden]	1.5497***
	(16.382)
[The evaluated country = Hungary]	0.0107
	(0.113)
[The evaluated country = Great Britain]	1.5812***
	(16.715)
[The evaluated country = Italy]	1.1885***
	(12.563)
[The evaluated country = Poland]	$0_{\rm p}$
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = France]$	-0.6011*** (4.496)
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = Spain]$	-0.6553*** (4.901)
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = Lithuania]$	-0.3260** (2.438)
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = Germany]$	-0.8343*** (6.240)
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = Sweden]$	-0.8935*** (6.683)
$[Evaluated \ COO's \ dimension = Diversity] \times [the \ evaluated \ country = Hungary]$	-0.4319*** (3.228)
[Evaluated COO's dimension = Diversity] × [the evaluated country = Great Britain]	-0.4414*** (3.301)
[Evaluated COO's dimension = Diversity] × [the evaluated country = Italy]	-0.7249*** (5.422)
[Evaluated COO's dimension = Diversity] $\times$ [the evaluated country = Poland]	0 <sup>b</sup>
[Evaluated COO's dimension = Innovativeness] × [the evaluated	-0.3032**
country = France]	(2.268)

(continued)

Table 6 (continued)

Parameter	Model 3 <sup>a</sup>
[Evaluated COO's dimension = Innovativeness] × [the evaluated	-0.3665***
country = Spain]	(2.739)
[Evaluated COO's dimension = Innovativeness] × [the evaluated	0.0032
country = Lithuania]	(0.024)
$[Evaluated \ COO's \ dimension = Innovativeness] \times [the \ evaluated$	-0.1561
country = Germany]	(1.168)
[Evaluated COO's dimension = Innovativeness] $\times$ [the evaluated	0.0471
country = Sweden]	(0.352)
$[Evaluated COO's \ dimension = Innovativeness] \times [the \ evaluated \\ country = Hungary]$	0.0740 (0.552)
$[Evaluated\ COO's\ dimension = Innovativeness] \times [the\ evaluated\ country = Great\ Britain]$	-0.0072 $(0.054)$
$[Evaluated \ COO's \ dimension = Innovativeness] \times [the \ evaluated \ country = Italy]$	-0.4753*** (3.550)
$[Evaluated \ COO's \ dimension = Innovativeness] \times [the \ evaluated \ country = Poland]$	0 <sup>b</sup>
[Evaluated COO's dimension = Quality] $\times$ [the evaluated country = France]	-0.6740*** (5.041)
[Evaluated COO's dimension = Quality] $\times$ [the evaluated country = Spain]	-0.4545*** (3.399)
$[Evaluated \ COO's \ dimension = Quality] \times [the \ evaluated \ country = Lithuania]$	0.0802 (0.600)
$[Evaluated \ COO's \ dimension = Quality] \times [the \ evaluated \ country = Germany]$	-0.1884 (-1.409)
$[Evaluated \ COO's \ dimension = Quality] \times [the \ evaluated \ country = Sweden]$	-0.1174 (0.878)
$[Evaluated \ COO's \ dimension = Quality] \times [the \ evaluated \ country = Hungary]$	0.0270 (0.202)
[Evaluated COO's dimension = Quality] $\times$ [the evaluated country = Great Britain]	-0.2634** (1.970)
$[Evaluated \ COO's \ dimension = Quality] \times [the \ evaluated \ country = Italy]$	-0.5166*** (3.864)
[Evaluated COO's dimension = Quality] × [the evaluated country = Poland]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] $\times$ [the evaluated country = France]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] × [the evaluated country = Spain]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] × [the evaluated country = Lithuania]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] $\times$ [the evaluated country = Germany]	$0_{\rm p}$
[Evaluated COO's dimension = Prestige] $\times$ [the evaluated country = Sweden]	$0_{\rm p}$
[Evaluated COO's dimension = Prestige] × [the evaluated country = Hungary]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] × [the evaluated country = Great Britain]	0 <sup>b</sup>
[Evaluated COO's dimension = Prestige] × [the evaluated country = Italy]	0 <sub>p</sub>
[Evaluated COO's dimension = Prestige] × [the evaluated country = Poland]	0 <sub>p</sub>
Residual $\hat{\sigma}_0^2$	0.8552*** (57.784)

(continued)

Table 6 (continued)

Parameter	Model 3 <sup>a</sup>
Intercept [subject = person id] Variance $\hat{\sigma}^2_{consumer}$	0.2233*** (8.861)

t-values are in parentheses

Table 7 A test of statistical significance of the differences in the adjustment of the subsequent models

Model	df	−2 log likelihood	Test	LRT	Significance level
Model 0	_	22,273.954			
Model 1	3	22,266.286	0 vs. 1	7.668	0.053
Model 2	8	19,081.997	1 vs. 2	3184.293	0.000
Model 3	24	18,921.675	2 vs. 3	160.322	0.000

### 7 Conclusion

The analysis confirms that there are differences in the evaluation of products and services in terms of the particular dimensions of their country of origin, and the differences depend on the country which the offer comes from. Hence, for some countries there might be some significant differences between, for example, Prestige and Diversity, and there might be some considerable differences between other dimensions for some other countries. Furthermore, it is possible to observe that the COO of the offer differentiates their evaluation much more than the COO of consumers.

The research also confirms the results of the previous studies obtained by other authors. Thus, the higher level of the economic development of a country, the lower risk of purchasing products and services it offers, perceived by consumers, and the higher guarantee of their quality (Al-Sulaiti and Baker 1998). Products coming from less developed countries are evaluated at a lower level because of their stereotypic perception (Liu and Johnson 2005), which can come as a considerable psychological barrier in international trade exchange. The results of the research indicate that in terms of the prestige, products and services coming from the old EU countries receive significantly higher evaluation than products and services coming from Poland. The evaluation of the prestige of the offer coming from Hungary does not differ much from the evaluation of products and services coming from Poland, whereas the evaluation of the prestige of Lithuanian products and services is significantly lower than of Polish products and services.

The multi-dimensional character of the COO effect comes as a recommendation for exporters of products and services to apply their individual approach towards marketing operations developed in the particular markets, because there might be

<sup>\*\*\*, \*\*,</sup> and \* represent the significance levels at 1%, 5% and 10% levels, respectively

<sup>&</sup>lt;sup>a</sup>Dependent variable: the evaluation of an offer

<sup>&</sup>lt;sup>b</sup>This parameter is set to zero because it is redundant

some differences between consumers coming from various countries in terms of their evaluation of the offer attributes.

The aim of further studies shall be focused on a detailed analysis of the differences between the COO dimensions in 9 countries. They shall be analyzed in relation to consumers who come from Lithuania and Poland. Considering the fact that the research sample consists of the students from two universities (Polish and Lithuanian), it is not possible to generalize the results of the research. It would be advisable to carry out some research with the participation of another population of respondents and in a larger number of countries.

### **Appendix: Interpretation of the Parameters of Model 3**

The symbol of the	
parameter	Description
$\alpha_0$	An average evaluation of Prestige for Polish products and services
$\alpha_0 + \alpha_1$	An average evaluation of Diversity for Polish products and services
$\alpha_0 + \alpha_2$	An average evaluation of Innovativeness for Polish products and services
$\alpha_0 + \alpha_3$	An average evaluation of Quality for Polish products and services
$\alpha_1, \alpha_2, \alpha_3$	The difference between subsequently Diversity, Innovativeness, Quality and Prestige for Polish products and services
$\alpha_0 + \beta_1$	An average evaluation of Prestige for French products and services
$\alpha_0 + \alpha_1 + \beta_1 + \gamma_{11}$	An average evaluation of Diversity for French products and services
$\alpha_0 + \alpha_2 + \beta_1 + \gamma_{21}$	An average evaluation of Innovativeness for French products and services
$\alpha_0 + \alpha_3 + \beta_1 + \gamma_{31}$	An average evaluation of Quality for French products and services
$\alpha_1 + \gamma_{11}, \alpha_2 + \gamma_{21}, \\ \alpha_3 + \gamma_{31}$	The difference between subsequently Diversity, Innovativeness, Quality and Prestige for French products and services
γ <sub>11</sub> , γ <sub>21</sub> , γ <sub>31</sub>	The difference between subsequently: Diversity, Innovativeness, Quality and Prestige for French services is higher by the indicated value, in comparison to the difference between subsequently: Diversity, Innovativeness, Quality and Prestige for Polish products and services. The differences are significant.

### References

- Ahmed, Z. U., Johnson, J. I., Ling, C. K., Fang, T. W., & Hui, A. K. (2002). Country-of-origin and brand effects on consumers' evaluations of cruise lines. *International Marketing Review*, 19(3), 279–302.
- Al-Sulaiti, K. I., & Baker, M. J. (1998). Country of origin effects: A literature review. Marketing Intelligence & Planning, 16(3), 150–199.
- Balabanis, G., & Diamantopoulos, A. (2008). Brand origin identification by consumers: A classification perspective. *Journal of International Marketing*, 16(1), 39–71.

- Balabanis, G., & Diamantopoulos, A. (2011). Gains and losses from the misperception of brand origin: The role of brand strength and country-of-origin image. *Journal of International Marketing*, 19(2), 95–116.
- Berentzen, J. B., Backhaus, C., Michaelis, M., Blut, M., & Ahlert, D. (2008). Does "Made in . . ." also apply to services? An empirical assessment of the country-of-origin effect in service settings. *Journal of Relationship Marketing*, 7(4), 391–405.
- Bikely, W. J., & Nes, E. (1982). Country of origin effects on product evaluations. *Journal of International Business Studies*, 1(3), 131–141.
- Boguszewicz-Kreft, M. (2014). Efekt kraju pochodzenia w usługach [Country-of-origin effect in services]. Sektor usług uwarunkowania i tendencje rozwoju, Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 353, 79–89.
- Boguszewicz-Kreft, M., Magier-Łakomy, E., Sokołowska, K., & Janiūnaitė, B. (2016). Dimensions of the COO effect referring to services and products Polish-Lithuanian comparisons. In Proceedings of the 3rd Business & Management Conference, 21–25 March, 2016, Lisbon. International Institute of Social and Economic Sciences, Prague [online]. Accessed February 20, 2017, from http://www.iises.net/proceedings/3rd-business-management-conference-lisbon/table-of-content/detail?article=the-country-of-origin-effect-in-the-selected-services-an-international-comparison
- Bose, S., & Ponnam, A. (2011). Country of origin effect on services: An evaluation of entertainment. *Managing Leisure*, 16(2), 98–107.
- Bruning, E., & Saqib, N. U. (2013). Cultural similarity and national bias: An assessment in an international service context. *Journal of Global Marketing*, 26(1), 41–56.
- Chattalas, M., Kramer, T., & Takada, H. (2008). The impact of national stereotypes on the country of origin effect: A conceptual framework. *International Marketing Review*, 25(1), 54–74.
- d'Astous, A., Giraud Voss, Z., Colbert, F., Carù, A., Caldwell, M., & Courvoisier, F. (2008). Product-country images in the arts: A multi-country study. *International Marketing Review*, 25 (4), 379–403.
- Eurostat. (2013, July). European commission [online]. Accessed February 20, 2017, from http://epp.eurostat.ec.europa.eu/statistics\_explained/index.php/International\_trade\_in\_services
- Figiel, A. (2004). Etnocentryzm konsumencki. Produkty krajowe czy zagraniczne [Consumer ethnocentrism. Home or foreign products]. Warszawa: PWE.
- Harrison-Walker, L. J. (1995). The relative effects of national stereotype and advertising information on the selection of a service provider: An empirical study. *Journal of Services Marketing*, 9 (1), 47–59.
- Hong, S., & Wyer, R. J. (1989). Effects of country-of-origin and product-attribute information on product evaluation: An information processing perspective. *Journal of Consumer Research*, 16 (2), 175–187.
- Javalgi, R. G., Cutler, B. D., & Winans, W. (2001). At your service! Does country of origin research apply to services. *Journal of Services Marketing*, 15(6/7), 565–582.
- Khare, V. P., & Popovich, K. (2010). Country of origin of services: Are all services created equal? Summer Internet Proceedings. 12, 113–116.
- Lianxi, Z., Zhiyong, Y., & Hui, M. K. (2010). Non-local or local brands? A multi-level investigation into confidence in brand origin identification and its strategic implications. *Journal of the Academy of Marketing Science*, 38(2), 202–218.
- Liu, S. S., & Johnson, K. F. (2005). The automatic country-of-origin effects on brand judgments. *Journal of Advertising*, 34(1), 87–97.
- Martín, M. O., & Cerviño, J. (2011). Towards an integrative framework of brand country of origin recognition determinants: A cross-classified hierarchical model. *International Marketing Review*, 28(6), 530–558.
- Melnyk, V., Klein, K., & Vlckner, F. (2012). The double-edged sword of foreign brand names for companies from emerging countries. *Journal of Marketing*, 76(6), 21–37.
- Michaelis, M., Woisetschläger, D. M., Backhaus, C., & Ahlert, D. (2008). The effects of country of origin and corporate reputation on initial trust. *International Marketing Review*, 25(4), 404–422.

- Morrish, S. C., & Lee, C. (2011). Country of origin as a source of sustainable competitive advantage: The case for international higher education institutions in New Zealand. *Journal of Strategic Marketing*, 19(6), 517–529.
- Nicolescu, L. (2012). The analysis of conceptual tools for the study of country of origin effect for hybrid offerings. *Management and Marketing*, 7(1), 3–14.
- Paswan, A. K., & Sharma, D. (2004). Brand-country of origin (COO) knowledge and COO image: Investigation in an emerging franchise market. *Journal of Product and Brand Management*, 13 (3), 144–155.
- Peterson, R. A., & Jolibert, A. J. P. (1995). A meta-analysis of country-of-origin effects. *Journal of International Business Studies*, 26(4), 83–101.
- Pharr, J. M. (2005). Synthesizing country-of-origin research from the last decade: Is the concept still salient in an era of global brands? *Journal of Marketing Theory and Practice*, 13(4), 34–44.
- Rezvani, S., Dehkordi, G. J., Rahman, M. S., Fouladivanda, F., Habibi, M., & Eghtebasi, S. (2012).
  A conceptual study on the country of origin effect on consumer purchase intention. *Asian Social Science*, 8(12), 205–215.
- Roth, M. S., & Romeo, J. B. (1992). Matching product category and country image perceptions: A framework for managing country-of-origin effects. *Journal of International Business Studies*, 23(3), 477–497.
- Saran, R., & Gupta, N. (2012). Country of origin vs. consumer perception: A literature review. IUP Journal of Marketing Management, 11(4), 66–75.
- Schooler, R. D. (1965). Product bias in the Central American common market. *Journal of Marketing Research*, 11, 394–397.
- Sikora, T. (2008). Znaczenie efektu kraju pochodzenia dla komunikacji w biznesie międzynarodowym [Country of origin effect and its significance to international business communications]. Zeszyty Naukowe SGH, 23 [online]. Accessed February 20, 2017, from http://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element.ekon-element-000152207999
- Sharma, P. (2011). Demystifying cultural differences in country-of-origin effects: Exploring the moderating roles of product type, consumption context, and involvement. *Journal of International Consumer Marketing*, 23, 344–364.
- Sharma, P., Mathur, R., & Dhawan, A. (2009). Exploring customer reactions to offshore call centers: Toward a comprehensive conceptual framework. *Journal of Services Marketing*, 23 (5), 289–300.
- Wong, K. A., & Folkes, V. (2008). Country-of-origin effects on consumers' attributions and word-of-mouth communications about services. Advances in Consumer Research, 35, 1029–1032.

# Correction to: Companies' Understanding of Transborder Cooperation: An Empirical Study in Poland and Republic of Belarus



Anna Wasiluk

**Correction to:** 

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The book was inadvertently published with mistakes in a reference and its citation. The reference has been corrected to "Balogh, P., & Pete, M. (2018). Bridging the gap: Cross-border integration in the Slovak–Hungarian Borderland around Štúrovo–Esztergom. *Journal of Borderlands Studies*, *33*(4), 605–622. https://doi.org/10.1080/08865655.2017.1294495", whereas it was published incorrectly as "Balogh, P., & Pete, M. (2008). Bridging the Gap: Cross-border Integration in the Slovak–Hungarian Borderland around Štúrovo–Esztergom. *Journal of Borderlands Studies*, 32, 1–18."

The updated online version of this chapter can be found at https://doi.org/10.1007/978-3-030-11872-3\_20