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MARKETING ACTIVITIES OF EARLY-STAGE ENTREPRENEURS IN SOUTH AFRICA
Jamie-Lee Botha¹ and Nomusa Benita Mazonde ²

Abstract:
Traditional marketing strategies are appropriate in environments where market conditions are conducive, resources are available, and firms satisfy well-defined customer needs. However, traditional marketing fails to early-stage entrepreneurs in less conducive environments because of its reactive approach and formula-based thinking. SMMEs in developing countries operate in environments that are financially constrained, where marketing budgets are not the main priority. As a consequence, limited marketing occurs in the early-stage of business development. Limited resources and environmental constraints force entrepreneurs to be more innovative in their marketing activities. This suggests that optimisation of marketing efforts is a must for entrepreneurs seeking successful outcomes. There is a dearth of research exploring the theoretical link between entrepreneurship and marketing for entrepreneurs in developing countries. This study investigated the features of the marketing function of early-stage entrepreneurs operating in South Africa. It further investigated the influence of limited resources on the marketing decisions of early-stage entrepreneurs. A qualitative study was conducted with 14 respondents being interviewewed, and thematic analysis was utilised to analyse the responses. The results indicated that even though early-stage entrepreneurs utilised digital marketing, the primary marketing activity was 'on the ground' marketing. Early-stage entrepreneurs still executed old-fashioned, cold-calling, and relationship building with customers being central to their businesses. The study also underscored the significance of social capital and networking for these entrepreneurs. Early-stage entrepreneurs boasted of their agility to adopt new technologies, offered personalised services and product packages to meet the customers' requirements. These entrepreneurs, however, do not fully exploit alternative marketing strategies that utilise online digital platforms viewed by literature as cost-effective for such entrepreneurs. The study recommends that the non-usage of digital marketing in the local context be further explored for early-stage entrepreneurs to unearth the circumstances that thwart its maximum usage and the effect thereof, on business development.

Keywords: Alternative marketing strategies, digital marketing, entrepreneurial marketing, early-stage entrepreneurs

INTRODUCTION
Entrepreneurs and small business owners trading in the South African market face political uncertainty, lack of marketing skills and financial constraints (Adclick Africa, 2018). In more consistent environments, traditional marketing would be more practical as the market conditions are predictable, and firms satisfy clearly defined customer needs (Maritz et al., 2010). However, in unpredictable environments, traditional marketing fails entrepreneurs because of its reactive approach and formula-based thinking (Stokes, 2000b). Employing traditional marketing may result in focusing on an imitating approach, serving existing markets and a lack of innovation (Morris et al., 2002). Shortcomings of the traditional marketing theory lead entrepreneurs to seek other innovative marketing strategies such as entrepreneurial marketing (EM) (Sadiku-Dushi et al., 2019). EM was born out of the practice of ventures operating in unconducive environments. Thus EM is considered an alternative to cope with the deficiencies of traditional marketing (O’Cass and Morrish, 2015). Unlike traditional marketing, EM is oriented by new innovative ideas rather than a customer's needs and wants (Sadiku-Dushi et al., 2019). The theoretical link between entrepreneurship and marketing has not received much research attention, and the resultant is a continued disintegration in the disciplines (Lam and Harker, 2015).

The unconducive resource-constraint environments entrepreneurs ply their trade in foster informal, non-sequential marketing decisions resulting in marketing activities that are continuously evolving, reactive and situational (O'Dwyer et al., 2009). Essential elements to the uniqueness of the marketing function of entrepreneurs are their deviation from the traditional marketing practices and narrow concept of marketing (Marcati et al., 2008). Entrepreneurs perceive marketing as a means to inform their customers of the firm, their products and services with the express intent of making sales (Reijonen, 2010).

Because of these challenges, this study explored the unique features of early-stage entrepreneurs’ marketing function in South Africa and how the scarcity of resources influenced their marketing decisions.

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THE SOUTH AFRICAN BUSINESS ENVIRONMENT

SMEs are considered as critical contributors to the economy of the country (Sadiku-Dushi et al., 2019). To make such contributions and to form sustainable entities, SMEs in South Africa require support, especially in the early stages of their ventures (Adclick Africa, 2018). The GEM report of 2017/2018 noted that as a country, South Africa is one of the least supportive when it comes to providing continued support to entrepreneurs (Adclick Africa, 2018, Singer et al., 2018). The failure rate of entrepreneurial entities is relatively high in the early stage of firm development (Gilmore, 2011). What may contribute to this is the general lack of marketing skills among small business owners in South Africa (Van Scheers, 2011). Fatoki (2014) posits that the failure of early-stage entrepreneurial businesses may result from lack of customer care exacerbated by inadequate or non-existent management and functional skills. Besides a lack of resources and marketing skills, social capital is added onto the list of possible causes of poor performance and failure (Gilmore, 2011). Financially constrained SMEs are unlikely to prioritise making a marketing budget, implying no marketing is done in the early stages of business development (Van Scheers, 2011). Apart from constraints aforementioned, entrepreneurs in South Africa face added constraints of gaining access to markets, especially as regards the prevailing economic conditions (Adclick Africa, 2018). Becherer et al. (2012) note the significance of marketing on the success of SMEs. Interestingly, limited resources and environmental constraints force entrepreneurs to become innovative in their marketing activities (Becherer et al., 2012). For successful outcomes, entrepreneurs must endeavour to optimise their marketing efforts.

TRADITIONAL MARKETING THEORY

The traditional marketing theory does not account for entrepreneurial activities such as risk-taking, proactiveness and innovation that occurs in entrepreneurship (Martin, 2009, Hultman and Hills, 2011). The essential aspects for traditional marketing theory are the four Ps: price, place, promotions, product, which firms organise in highly structured, logical step-by-step processes (Martin, 2009). SMEs and entrepreneurs face myriad challenges that necessitate agility, but the traditional 4 Ps does not permit for the flexibility necessary to overcome entrepreneurial challenges (Martin, 2009). In agreement, Hultman and Hills (2011) state that entrepreneurs are driven by creating value for customers and innovation, which may not necessarily be achieved through 4Ps application and extensive analysis of the market. Also, entrepreneurial activities such as word of mouth, referrals and established long term relationships are not covered by the traditional marketing mix (Sadiku-Dushi et al., 2019). Hultman and Hills (2011) argue that entrepreneurs are more effective in approach, whereas a causative viewpoint governs traditional marketing theory.

ENTREPRENEURIAL MARKETING (EM)

EM was developed around the marketing activities of small businesses and start-ups trading in challenging environment (Toghaeae and Monjezi, 2017). It is, therefore, suitable in the South African markets. Also, EM mimics some of the attributes of entrepreneurship such as proactiveness, opportunity recognition, risk-taking and value creation, making it appropriate to investigate the marketing activities of early-stage entrepreneurs (Kurgun et al., 2011, Morris et al., 2002).

With EM, marketing is approached from an entrepreneurial perspective. It provides opportunities to bridge the gap between strategic action and entrepreneurial action (Kurgun et al., 2011). EM serves as an umbrella for all alternative marketing strategies like disruptive digital marketing, guerrilla marketing and other alternative marketing strategies (Morris et al., 2002).

The Integrative model comprises of the following key dimensions: proactiveness, innovative, calculated risk-taking, resource leveraging (guerrilla marketing), opportunity focused, value creation and custom intensity (radical marketing and expeditionary marketing) (Morris et al., 2002). The seven dimensions may not necessarily be in use simultaneously to be considered as successful deployment of EM. Still, combinations tailored to the requirement of the entrepreneur to take the products and services to the market may suffice (Morris et al., 2002).

The marketing activities of small business owners are implemented by the entrepreneurs as owners and are, therefore are governed by the entrepreneur's characteristics (Carson and Gilmore, 2000). Their characteristics further intensify the extent to which limitations such as resource constraints influence the entrepreneur's marketing decisions (Carson and Gilmore, 2000). The marketing activities of entrepreneurs may not necessarily correspond to the conventional description of the marketing theory. EM is an appropriate marketing theory to examine the marketing activities of early-stage entrepreneurs and has been shown to have a positive impact on the performance of the firm (Becherer et al., 2012, Kurgun et al., 2011). This paper, therefore, studies the utilisation of the dimension of EM by early-stage entrepreneurs in South Africa.
BRICOLAGE MARKETING

The theory of entrepreneurial bricolage speaks to the resource-constrained environments entrepreneurs find themselves in (Fisher, 2012, Van Scheers, 2011). It conceptualises the ability to utilising resources at an entrepreneur's disposal and applying those resources to newer opportunities to solve problems encountered (Fisher, 2012). Bricolage theory is about creatively repackaging and bundling of resources to discover opportunities and about creating a unique product (Fisher, 2012, Desa and Basu, 2013). Entrepreneurs need to be creative in their bundling and resource combinations if they intend to generate value from cheap resources (Desa and Basu, 2013). The processes and activities of bricolage permit entrepreneurs to realise the alternative application of resources (Desa and Basu, 2013). The bricolage activities that may be utilised to overcome resource-constraint include customer and markets input, labour and skills input as well as regulatory and institutional environmental inputs (Fisher, 2012). Knowledge-based resources are considered powerful intangible resources that give firms the ability to create non-imitable products and services, revise strategies, tactics and to envisage environmental changes (Wiklund and Shepherd, 2003). The capability of an entrepreneur to effectively organise and combine resources to add value and/or exploitation of opportunities is considered a resource in and of itself (Alvarez and Busenitz, 2001). Entrepreneurship requires the usage of different resources as a primary condition.

EFFECTUATION MARKETING

The effectuation theory indicates that entrepreneurs operating in highly unconducive conditions follow a decision logic (Desa and Basu, 2013, Van Scheers, 2011). The effectual approach is about combining available resources and co-creating with key stakeholders and constant reiterations of a product until it suits market requirements (Miles et al., 2015, Read et al., 2009). This approach is about leveraging resources to attain favourable outcomes (Morrish, 2011). The decision-making methods employed are grounded on non-predictive designs intended for use under uncertainty (Read et al., 2009). The approach is different from traditional marketing in that the product is developed first. This is then followed by assessing customer reactions. The products and services of the entrepreneurs remain at the centre of their marketing plan. With feedback from customer engagement, the products and services are re-engineered to suit customer needs. While in the traditional marketing plan, the marketing mix (product, price and location) and the customer are central of the marketing plan (Martin, 2009, Morrish, 2011). With this option, the intent is that customers will then stream in and buy the products and services (Morrish, 2011). The entrepreneur commences the process by taking stock of the available resources and then evaluates the best way the resources can be leveraged for the intended outcome. Further, as entrepreneur utilising an interactive marketing approach prefers to form strategic alliances with key stakeholders rather than with the competitors (Morrish, 2011). Some argue that the 'Effectual Approach' does not necessarily integrate the theories of EM but instead inherits the entrepreneurial features espoused by entrepreneurs operating in unconducive conditions (Sullivan Mort et al., 2012). Bricolage and Effectuation have foundations in resource base theory which posits that a venture's competitive advantage rests in the ability to exploit limited resources (Janet and Ngugi, 2014). The capability to apply limited resources together with market knowledge base resources is a key survival tool for early-stage entrepreneurs. It is of research interest to examine how bricolage and effectuation are implemented by entrepreneurs operating in the South African context.

ALTERNATIVE MARKETING STRATEGIES

Alternative marketing strategies are particularly useful under challenging conditions where the implementation of conventional marketing methods may be difficult and at times, outdated (Morris et al., 2002, Toghraee and Monjezi, 2017). Examples of such strategies include word of mouth marketing (WOM); social media; email marketing; brand communities; viral marketing; guerrilla marketing; events based marketing; mobile marketing. The common element with these alternative strategies is that they tackle the current limitations of the utilisation of traditional marketing methods in challenging environments (Morris et al., 2002). The author acknowledges that none of the strategies listed provides a future proof, comprehensive guide for marketing practice. Online marketing via email, social media, mobile marketing and guerrilla marketing are perceived as cost-effective marketing activities that can assist in accessing a large number of prospect customers (Castronovo and Huang, 2012). Further, it provides entrepreneurs with access to customer data which assists in better identification of each customer's needs and wants. The authors contend that its use may aid in generating positive customer interactions with the brand increasing both customer loyalty and customer retention. Bearing in mind its cost-effectiveness, it is worth examining if online platforms would be a cheap means to marketing products and services for entrepreneurs operating in the South African markets.
METHODOLOGY

The qualitative research approach was taken because it allowed for identifying and understanding the behaviour and marketing decision-making processes taken by early-stage entrepreneurs (Dana and Dana, 2005). For this study, SMEs of five years and less were considered early stage. Fourteen face-to-face interviews with entrepreneurs in the Gauteng region were undertaken. The interviews were recorded and transcribed verbatim. The interview transcriptions were utilised to do a thematic analysis that was driven by the research problem statement (Braun and Clarke, 2006).

FINDINGS AND DISCUSSIONS

Digital Marketing

Guerrilla marketing, viral marketing and social media are not maximised because of entrepreneurs' lack of digital marketing skills. The results indicate that entrepreneurs advertise on online platforms using company websites and with a few on social media and emails. This is despite the benefits of social media of customer loyalty, generation of positive brand awareness, and positive brand outlook outlined by (Castronovo and Huang, 2012). Instead, entrepreneurs considered social media marketing as a full-time job. "You know someone is hired specifically just to deal with social media because it is a full-time thing" which took them away from doing other jobs such as making sales and managing the venture. Although the entrepreneurs participated on the platforms, they saw no value add from these platforms as only one participant admitted to converting leads from these platforms into sales. This result aligned with Adclick Africa (2018), who attested that only a few percentages of SMEs on the Africa continent use technology such as e-commerce and cloud base services because of the costs involved. Unfortunately, a company website was seen only as a source of information for potential customers, for example providing the profile of the business rather than a marketing tool. It was perceived as more of a confirmation of the business' credibility. "we have a website where we have got all our information on there we have, you know, the Facebook, Twitter, all that kind of stuff."

To communicate their product and service offering, some of the participants utilised emails. The literature review reveals that email marketing is a cost-effective communication channel used to increased customer relations, brand engagement, and promotion of positive WOM (Castronovo and Huang, 2012). Other online platforms utilised by entrepreneurs were industry-specific platforms such as dribble, WhatsApp for business and blogs. Mobile marketing is the most popular type of digital marketing in the country. Adclick Africa (2018) reported that 86% of SMEs utilised smartphones to do business.

On the Ground Marketing

Print media, such as flyers are still popular forms of advertising in South Africa evidenced by people seen handing out flyers at traffic lights on South African roads. Many of the participants still took their products to market by cold calling and built relationships with individuals identified as the decision-makers in the prospect companies. "...but mainly it's about cold calling." Another participant echoed the same sentiments "Forget about this new age social media. The real work is on the ground whether it's clients or the learners directly, so social media just shows the work that you're doing". Stokes (2000b) classified such marketing activities as "interactive marketing." The effect of 'on the ground marketing' is that entrepreneurs maintain constant contact with their customers enabling them to service customer needs quicker.

Customer-Centric

The study established that entrepreneurs usually start their ventures in industries they were previously employed. These entrepreneurs show that they are opportunity-driven. Morris et al. (2002) highlighted this aspect as an EM dimension in that these entrepreneurs realise untapped aspects as solutions to the problems in their industry. They then redefine a product offering that big corporates are unable to deliver. It accorded the entrepreneur the opportunity to identify gaps in the industry and supplying those gaps with a niche set of skills. This is following the targeted customer strategy outline by the authors. The entrepreneurs commence their businesses by servicing niche markets and servicing them well "Gauteng, Western Cape are the two leading provinces in the early adoption of technology". The entrepreneurs do not attempt to be everything to everyone; instead, they focus the scarce resources on particular customer segments. Stokes (2000b), Stokes (2000a) found that entrepreneurs had strategic awareness of the market places, eying specific market segments, and implementing a bottom-up customer strategy through pursuing and influencing niche groups of people.
The interactive marketing espoused by participants fosters relationships of trust with their customers "we have to build trust, they have to have confidence, and they have to get to know me a bit and build a relationship". This provides entrepreneurs with an appreciation of the business of the customer, thus developing into strong customer/entrepreneur relationships. The fostered relationships with satisfied customers result in word of mouth referrals. The stronger the relationships fostered with customers, the more willing the customer is in promoting the products and services by word of mouth (Castronovo and Huang, 2012). What is evident from the results is that relationship marketing is a key marketing activity in which participants engaged. Interpersonal relationships, relationship marketing and personal networks are the foundation of marketing. These are essential for business success (Lam and Harker, 2015). Marketing is really about people and building relationships (Lam and Harker, 2015).

Social Capital

Many of the participants were employed in the same industry their business is in meaning they had databases of personal contacts. Toghræe and Monjezi (2017) confirms the usefulness of networks and networking in advancing the effectiveness of marketing. The participants leveraged those relationships developed over time and utilised them to back their credibility when canvassing for new customers. "We met people up who were familiar with our capabilities". The marketing activities of entrepreneurs were reliant on the entrepreneurs' contacts and social networks (Lam and Harker, 2015, Reijonen, 2010). The industry expertise, industry reputation, and skills set, which some of the entrepreneurs had from their prior employment offered them the added advantage of knowing their competitors. It also gave them an appreciation of where their new ventures could fill the gap so as to provide unique products and services. Early-stage entrepreneurs’ networks, evolved from being initially identified on the basis on path dependency to intentional network, particularly in the earlier phases (Lam and Harker, 2015). The entrepreneurs grew their social capital by attending industry exhibitions and expositions. "So, the way that has worked best is on the ground, so schools, career expos, exhibitions.” Most of the participants increased their customer bases through referrals from family, friends or satisfied customers. "you know how it happens with start-ups its either word of mouth or family". Both Stokes (2000b) and Castronovo and Huang (2012) acknowledge that word of mouth from networks of friends is likely to be the most efficient WOM referral. "rather we generate new business mostly from referrals." Higher returns are the yield from WOM referrals in the form of increased customer retention and customer base increases (Castronovo and Huang, 2012).

Value Creation

Many of the participants said their business was not necessarily innovative. Instead, the product offering was merely packaged and communicated in a creative and personalised form “we designed from scratch, we designed it with you in mind and your target in the industry”. Entrepreneurs created value for customers by offering unique personalised product offering “add, that twist that makes you unique”. Creative repackaging and bundling resources to generate unique products is implementing bricolage marketing (Desa and Basu, 2013). The creativity of the product offerings is not only about the innovation of products but may also be about how the product is repackaged. Innovative orientated EM is about redefining the product offering and being innovative, which takes a different format in the South African context (Stokes, 2000a). Because of financial constraints, entrepreneurs in South Africa may not necessarily do much in terms of innovative product development (Adclick Africa, 2018); instead, they creatively repackaged product offerings. As an example, one participant designs logos by hand from scrap; while another used free open source code and creatively redesigned and repackaged to provide customised solutions to clients. Entrepreneurs invest their time in getting to know their customers and their needs to provide creative and customer-oriented solutions that differentiate the customers from their competitors. These value-based approaches are about continued creation of value solutions for the customers’ wants and needs (Morris et al., 2002). One participant strategically assessed the frontrunners in the industry and followed suit only once the market endorsed the technology. The participant learns and leverages from the mistakes from the frontrunners and uses the knowledge gleaned to come up with refined customer-oriented solutions. The entrepreneurs showed that they can adapt to market trends quicker than big businesses "if I had to change strategies now I am a speed boat, they are a great ship and so for them to turn it is gonna take a while.” Another participant targeted only early adopters and piloted their products with them. Another entrepreneur used data analytics to evaluate the market and targets customers accordingly. Others entrepreneurs purposefully advertised and operated under the radar of the more prominent industry players in their markets. The results indicate that entrepreneurs focused their strategies and played to their strengths. Indicating that entrepreneurs have an unparalleled appreciation of the markets they operate. They piggybacked off strategic partnerships with individuals, reputable companies and/or NGOs to obtain access to particular customer segments when necessary.
Education

Within the South African markets, the level of education of entrepreneurs appears to add to the entrepreneurs' credibility in the industry "I'm a qualified Quality Assurer" "she's like the top media strategist in the country.", "I've studied colour theory". Participants invested in education and viewed educational spent and employing talented individuals as creating innovation for their ventures.

Leveraging key competences and skills is considered as an aspect of competency marketing (Carson and Gilmore, 2000). Entrepreneurs leverage their pull of talents to attract customers and exploit their industry reputations to access to new markets. Where they lack capacity, entrepreneurs further equip themselves by either using incubators or tertiary institutions to enhance knowledge. This stance taken by entrepreneurs is supported by (Wiklund and Shepherd, 2003), who says knowledge is considered a powerful intangible resource that can be utilised to create sustainable differentiation.

CONCLUSION

The South African early-stage entrepreneurs predominantly utilise on the ground marketing. They also make use of cold calling, informal networking and sales meetings to foster relationships with customers. They leverage their social capital within the industries and attain new customers from referrals from friends, family members and satisfied customers. The entrepreneurs are proactive and constantly monitor trends and adapt where necessary. The entrepreneurs opted for a bottom-up customer strategy whereby they targeted a particular group of influencers (industry experts and/or early adopters) and served them well. It was this mind-set that led to them investing in education to acquire the correct capabilities to serve the customers’ need best.

Bricolage and effectuation marketing was evident in the entrepreneurs' abilities to co-create products and services with their customers and creatively repackaging products. Entrepreneurs utilised creativity to provide customers with unique personalised solutions to suit customer needs. Collaborations with reputable players such as philanthropists, NGOs and industry experts were made to benefit from capabilities and resources that the entrepreneurs’ firms could not offer. Knowledge-based resources were perceived as essential aspects of the entrepreneurs’ ventures. Money was expended by up-skilling staff and also on retaining existing talent to bolster their in-house capabilities.

South African early-stage entrepreneurs have an online presence using emails, websites, some social media platforms such as and LinkedIn and Facebook. Unfortunately, they did not perceive having an online presence as a value add to their businesses. Instead, they viewed social media advertising as more of a full-time occupation. As such, the entrepreneurs do not fully exploit the cost-effective alternative marketing strategies that utilise online platforms.

RECOMMENDATIONS

The recommendation is that digital marketing in the South African context is explored to uncover what prevents the maximisation of digital platforms and its perceived impact of the growth of SMEs. It also recommended that in the interest of the country’s economic development, institutions such as the government and incubators endeavour to provide SMEs with platforms to build up networks and social capital to enhance their survival rates. A recommendation for further study would be to expand the study to include other regions of the country to provide a more comprehensive perspective. It is also recommended to replicate the study for a specific industry and examine particular communication channels, marketing activities and its perceived impact on early-stage entrepreneurs. Lastly, based on the disruptive era, the economies the world over find themselves in, it may be worth investigating early entrepreneurs’ usage of digital platforms post Covid-19 pandemic.

REFERENCES

EXAMINATION OF PERCEIVED ADDED VALUE AND USEFULNESS FROM UTILIZATION OF FACIAL BIOMETRIC TECHNOLOGY AMONG BUSINESSES IN SLOVAKIA

Michal Budinský 1 and Janka Táborecká- Petrovičova 2

Abstract:
Biometric systems are very quickly becoming an essential part of our everyday life, while their more intense implementation in commercial and public sphere promise us increased safety and simplification of process and identification of persons. As well as these technologies, especially facial biometric technology, abounds with many functions, applications and benefits that might be convenient for businesses, their usefulness among different businesses may be questionable. Therefore, we decided to investigate perceived added value and perceived usefulness of facial biometric technology among businesses operating in Slovakia. The main aim of this paper is to reveal how businesses operating in Slovakia perceive facial biometric technology from perspective of added value and usefulness. Mainly, we focused our attention on identification of the certain level of added value perceived from utilization of this technology among businesses, on exploration of what usefulness level do business see from implementation of facial biometric technology and finally on examination of potential relationship between added value/usefulness and business size. Within our research we approved assumptions that businesses of bigger size perceive higher added value and higher usefulness from utilization facial biometric technology, compared to smaller businesses. In addition, we confirmed dependence between business stage of AIDA model and perceived usefulness or added value, moreover we identified relationship between perceived usefulness and purchase intention of businesses. Based on the results were formulated several managerial implications. Research presented in this paper is solved with the national project VEGA 1/0488/20 Market, marketing, legislative and ethical aspects of biometric technologies utilisation in commercial sector (2020-2022, project leader Janka Taborecka-Petrovicova).

Keywords: Facial Biometric Technology. Added value. Usefulness.
JEL: 032

INTRODUCTION
Biometric systems are very quickly becoming an essential part of our everyday life, while their more and more intense implementation in commercial and public sphere promise us increased safety and simplification of process and identification of persons. Therefore, we see very interesting to investigate perceived added value and usefulness of facial biometric technology among businesses operating in Slovakia. Adaptation of biometric technologies helps businesses to adjust their offer and in store activities to consumer’s needs, expectations and habits. Moreover, this information can be transformed and used also in cooperation with other business systems and activities, such as CSR, stock management, store layout or evaluation of marketing activities in order to improve and optimize them. In addition, implementation of biometric systems in private sphere represents special form of information management with ability of employee identification, increase of security and development of individual marketing and unique customer loyalty programs. Furthermore, commercialization of these technologies represents high potential in profit increase for companies (Hoek, Chapman, 2006).

THEORETICAL BACKGROUND
As well as, we deal with issue of added value and usefulness related to the AIDA model, we consider necessary to provide simple description. Kashyap (2017) described AIDA model as a tool that is able to identify particular cognitive stage of individuals during a process of buying products and services. This model is also described as a funnel, that filter consumers and still smaller amount proceed from one stage to another, based on reference to the buying behavior. AIDA model refers to the 4-stage model starting with “attention/awareness” about particular product, further stage is about development of “interest” in product or service, accompanied with consideration of purchase intention by “desire” in product and finally resulting in “action” represented by real purchase of product or service. In order to enrich problematic, we decided to apply understanding of this process by Rozenfeld (2006, In: Manfio and Lacerda, 2016) because he stressed the priority of providing higher value for customers through products. Therefore, businesses are able through this process to launch new product/technology in order to meet changing

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2 Matej Bel University, Slovakia
needs of customers, to make products more attractive and give them new functionalities or innovations or to become global within such competitive environment as it is recently.

Biometrics at all represents sophisticated technology, which is able to identify unique physical and behavioral feature with the main purpose of its backward identification (Shyam, Singh, 2016). Biometric signs, which are used for authentication purposes include fingerprints, face, palm, foot, geometry of hand, distribution of veins on the hand, nail bed, iris, retina, body smell, skin reflection, shape of ear, teeth and DNA. On contrary, behavioral characters, used for authentication of persons are voice, lips motion, signature, walk and strength of the keystroke (Langerdenfer, Linnhoff, 2005; Barde, Zadgaonkar, 2015).

Facial biometrics or face recognition technology belongs to the family of biometrics solutions. This technology is able to identify, to measure and to connect specific characteristics of persons for the purpose of their identification and authentication. This technology is implemented into the new or existing camera system and detects faces of persons, collect their features and compare them against templates in a database (https://findbiometrics.com).

However, talking specifically about facial biometric technologies, we can find their utilization within many distinctive areas. We can mention for example security enforcement, where police in Brussels utilized facial recognition system from FBI to identify the “man in a hat”, responsible for terrorist attack. Moreover, in order to prevent any issues South Wales police implemented facial recognition technology within the UEFA Champions League Final in 2017. Walmart is testing a facial recognition to prevent shoplifting. Next, it is not a surprise that we can find implementation of this technology within payment companies. This industry has undergone rapid changes within past decades, because of changes in customer payment preferences. Interestingly, MasterCard recently launched a new concept for payment through the selfie app. This app is based on facial recognition using a phone front camera, to confirm payments (Davis West, 2018).

METHODOLOGY

The main aim of this paper is to reveal how businesses operating in Slovakia perceive facial biometric technology from perspective of added value and usefulness. Mainly, we focused our attention on identification of the certain level of added value perceived from utilization of this technology among businesses, on exploration of what usefulness level do business see from implementation of facial biometric technology and finally on examination of potential relationship between added value/usefulness and business size. In order to investigate this issue, we performed primary research. In relation to fulfilment of main aim, we have formulated hypotheses H1 and H2.

\[ H1: \text{We assume that there is a positive relationship between size of business and perceived added value, therefore bigger business, higher added value perception.} \]

\[ H2: \text{We assume that there is a positive relationship between size of business and perceived technology usefulness, therefore bigger business, higher usefulness perception.} \]

For the purpose of this paper, we performed quantitative research, while questioning was applied as a data gathering method and as a tool we used a questionnaire survey. In this research, we approached businesses of relevant size and from different industry, but operating in Slovakia. For the purpose of data collection process, we used two different forms. Firstly, students from Faculty of Economics at Matej Bel University participated as field researchers in this research, because they were asked to visit businesses across Slovakia and to fill up questionnaire with adequate representatives. Secondly, after process of data collection from students terminated, we approached businesses in Slovakia by e-mail. For this purpose, was created an online version of our questionnaire in Google Docs application. In order to approach as many businesses as was possible, we decided to utilize access to database of contacts through analytical portal. This process last 3 months from September to November of 2019. Within our questionnaire we utilized questions with semantic differential statements, basic optional questions or level of agreement statements, enhanced by 7-point Likert scale to ensure sufficient range of options. For verification of hypotheses and statistical testing of various relationships within the study we utilized correlation analysis, especially Spearman correlation coefficient.

For purpose of our research, we deliberately focused on businesses with at least 10 employees, therefore small, medium and large businesses, because potential of this technology in micro-businesses is very small and we do not expect their interest in facial biometric technologies implementation. Finally, from data collection process, we were able to reach 521 complete answers that follow representativeness criteria (research sample representative by two signs – size of business /number of employees and region/business residence).

Within our research, we collected 521 complete answers, while structure of these respondents can be divided into distinctive groups according identification criteria. We decided to distribute these respondents according to the criteria: business activity, ownership, average annual revenues, business size and region. In our research sample were 189 of manufacturing businesses (36.28%), 62 of wholesalers (11.90%), 47 of retailers (9.02%) and 223 businesses from service (42.80%). Further from total amount, 371 of businesses (71.21%) are owned solely by Slovak owners, 19 of businesses (3.65%) are owned mostly by Slovak owners, 11 of respondents (2.11%) are half
owned by Slovak and half owned by foreigners, 32 businesses (6.14%) are mostly owned by foreign owners and finally 88 of business (16.89%) are solely owned by foreign owners. Later, our research sample consist of 236 businesses (45.30%) with average annual revenues less than 2 million €, 180 businesses (34.55%) with average annual revenues between 2 and 10 million €, 75 of businesses (14.40%) with average annual revenues between 11 and 50 million € and 30 of businesses (5.76%) with average annual revenues higher than 50 million €. Research sample consists of 79.27% (413) of small business with 10-49 employees, 17.49% (91) of medium size businesses with 50-249 employees and finally 3.26% (17) of large businesses with more than 250 employees.

RESULTS AND DISCUSSION

When talking about opinions of businesses on facial biometric technology, within our study we were interested in overall added value perceived by respondents. Distribution of respondents by perceived added value is depicted in following Graph 1.

Graph 1. Distribution of Businesses by Perceived Added Value

In spite of, there are several benefits of implementation of facial biometric technology in businesses we can see that reality of perceived added value by our research sample is different. For example, only 3.45% (18) of respondents perceive high added value for their business from implementation of facial biometric technology, followed by 6.14% (32) who perceive relatively high added value. Together, we may see that only 22.26% (116) of businesses perceived added value is above average, while 38.77% (286) of businesses stated that their expected added value is below average. This fact could be caused due to not wide-spread information about this technology, or due to different associations with usage of this technology (probably price, difficulty of its implementation, trade-off between costs and benefits, etc.).

Within identification of added value perceived by businesses, we decided to reveal possible differences between identification variables. First of all, we started with different industry branches. We have to state that answers of manufacture businesses and service providing businesses were very similar to the overall results of our research sample. Different findings were revealed within wholesale, where up to 33.87% of wholesale respondents perceived added value above average, what is about 10% more than results of whole research sample. Further, we took a look from business size perspective based on number of employees. From this point of view, we found out that in case of large businesses (more than 250 employees) only 17.65% of them perceive very low added value (seventh point on Likert scale) from implementation of this technology. Compared to the small businesses (10-49 employees) were this option was selected by 29.78% of businesses or by medium businesses (50-249 employees) where it represented 20.88% of respondents.

Next, we compared answers of respondents based on their average annual revenues and we found out some differences. We have identified that in case of business with average annual revenues between 11 and 50 millions of €, only 44% of respondents perceive added value below average, what is 10% decrease in negative added value
perception. On the other hand, up to 36% of these businesses see added value on level above average. Hence, we can see almost 15% increase in positive added value perception within this group of businesses, therefore they may represent one of focus group for involved businesses.

During answers processing, we took a look also at the potential relationship between added value and other variables. After series of statistical tests via SPSS program (Spearman), distinctive relationships have shown. Firstly, statistically significant relationship with indirect middle-strong dependence (Spearman’s rho = -0.238) between perceived added value and stage of AIDA model was proved, as well as p-value (0.00) is lower than Alpha (0.01). According to the character of questions and statements, we can conclude that businesses that are in higher stage of AIDA model (not only have heard about, but also think about possible purchase or higher) perceive higher added value from implementation of facial biometric technology.

Table 1. Stage of AIDA Model & Added Value

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Stage of AIDA Model Correlation Coefficient</th>
<th>Added Value Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Stage of AIDA Model</td>
<td>-0.238**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1.000</td>
<td>-0.238**</td>
</tr>
<tr>
<td>N</td>
<td>521</td>
<td>521</td>
</tr>
<tr>
<td>Added Value</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>-0.238**</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>521</td>
<td>521</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Talking about added value, we were interested also in overall perception of businesses about usefulness of this technology. In order to reveal this issue, we used simple question based on 7-point Likert scale in order to let enough space for respondents to express their opinion. Distribution of respondents by perceived usefulness of facial biometric technology in their business is depicted in following Graph 2.

Graph 2 Distribution of Businesses by Perceived Usefulness

Based on information from graph, we can conclude that perceived usefulness of facial biometric technology among business in Slovakia is relatively low. Specifically, only 5.57% (29) of respondents see this technology as
completely usable for their business and 5.76% (30) of respondents see technology as relatively usable. On the other hand, 23.99% (125) of respondents perceive facial biometric technology as relatively useless, while 14.78% (77) of all respondents perceive this technology as completely useless for their business. Finally, 18.62% of business were indecisive in this question. This fact of low usefulness could be caused similarly due to different aspects such as lack of information about facial biometric technology, individual units of our research sample or for example, due to low interest of businesses in Slovakia at all. As well as we included businesses of different industrial branches in our research, it’s obvious that this technology is not usable in all businesses according to their business activity. Therefore, businesses involved in facial biometric technology commercialization should focus their attention especially to those businesses that see at least little usefulness of this technology in their processes and activities, until situation on a market do not change, to not waste their effort, time and money.

From this reason, we were interested in distribution of answers, according to some different identification criteria in order to reveal possible deviations. First of all, we focused on businesses according to their size and found out that within large businesses (more than 250 employees) perception of usefulness is different compared to the results of overall research sample. At first, responses related to the usefulness level below average were selected only by 41.18%, what represent circa 15% decrease. Moreover, huge increase was recorded within usefulness level perceived as above average, when equally 41.18% picked this option, what represents growth by circa 17%. These facts show us that larger businesses tend to perceive usefulness of this technology more positively and see also higher added value from its implementation.

In addition, we analysed differences in usefulness perception based on annual average revenues of businesses. Here we find out that from businesses with revenues between 11 and 50 million €, 34.67% consider it as useful and only 48% as useless, while businesses with revenues over 50 million € see it even more positive, because up to 40% of them consider it useful and only 43% as useless. Moreover, we approved direct relationship between average annual revenues of business and perceived usefulness (thus higher revenues, higher usefulness).

Next, we found interesting to reveal possible relationship between usefulness and other variables. After series of statistical tests, we found statistically significant relationship with indirect middle-strong dependence (Spearman's rho = -0.258) between perceived usefulness of facial biometric technology and stage of AIDA model was approved, because p-value (0.00) is lower than Alpha (0.01). Therefore, according to the character of questions and statements, businesses that are in higher stage of AIDA model (not only have heard about, but also think about possible purchase or higher) see higher usefulness of facial biometric technology.

Table 2. Stage of AIDA Model & Usefulness

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Stage of AIDA model</th>
<th>Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>521</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Correlation Coefficient</td>
<td>-.258**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>521</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

In addition, we examined relationship between perceived added value among businesses and perceived usefulness of this technology. Apparently, correlation between these variables was shown, while according to the Spearman test, statistically significant relationship between these variables with direct strong dependence (Spearman's rho = 0.828) was approved, because p-value (0.00) is lower than Alpha (0.01). Thus, we can conclude that businesses which perceive higher added value from implementation of facial biometric technology, see also higher usefulness of this technology for their business.
Further, as perceived added value and perceived usefulness goes hand by hand (proved by Spearman correlation test with direct strong dependence) also relationship between perceived usefulness and purchase intention was expected. According to the results of statistical test, statistically significant relationship between these variables with direct medium-strong dependence (Spearman's rho = 0.632) was approved, because p-value (0.01) is lower than Alpha (0.01). Therefore, it means that businesses who perceive higher usefulness of facial biometric technology, showed higher purchase intention.

Finally, we focused our attention on verification of hypotheses. At first, we evaluated $H_1$, where we expected positive relationship between size of business and perceived added value. Results of statistical tests showed us that, there is statistically significant relationship between these two variables, while indirect low dependence (Spearman's rho = -0.131) was proved, as p-value (0.003) is lower than Alpha (0.01). Hence, according to the different formulation of questions and statements we can say that, with increased average annual revenues, businesses perceive higher added value from implementation of facial biometric technology. We can conclude that we reject 0 hypothesis, therefore we accept hypothesis $H_1$, which is confirmed. Results of statistical tests are depicted in following output.

**Table 3. Added Value & Usefulness**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Added Value</th>
<th>Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Added Value Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>521</td>
<td>521</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Correlation Coefficient</td>
<td>.828**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>521</td>
<td>521</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**

**Table 4. Usefulness & Purchase Intention**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Purchase Intention</th>
<th>Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Purchase Intention Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>252</td>
<td>252</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Correlation Coefficient</td>
<td>.632**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>252</td>
<td>521</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**
Next, we evaluated hypothesis \textbf{H}_2, where we expected positive relationship between size of business and perceived technology usefulness. Based on results of statistical tests, we found out statistically significant relationship between these variables with indirect low dependence (Spearman's rho = -0.133), as well as p-value (0.00) is lower than Alpha (0.01). Thus, according to the different formulation of questions and statements we can say that, with increased average annual revenues, higher usefulness of facial biometric technology is perceived among business. We can conclude that we reject 0 hypothesis, therefore we accept hypothesis \textbf{H}_1, which is confirmed.

Table 6. Hypothesis \textbf{H}_2 verification

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Usefulness</th>
<th>Business size (average annual revenues)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Correlation</td>
<td>-1,000</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Coefficient</td>
<td>-.133**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>521</td>
</tr>
<tr>
<td>Business size (average annual revenues)</td>
<td>Correlation</td>
<td>-.133**</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Coefficient</td>
<td>.002</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>521</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

CONCLUSION

From practice, we know that if business sees some product/technology as useful and perceives a high added value from its utilization than considers its purchase. Therefore, we contributed practically by identification of level of added value perceived by businesses and perceived usefulness. Later, these findings were used within identification of potential relationships between these factors and other aspects of attractiveness perception, while many of them have been proved such as higher usefulness perception, means higher purchase intention or higher added value perceived results in interest for more complex form of implementation of this technology. Therefore, these relations might be helpful for businesses commercializing this technology in decision making.

REFERENCES

HYBRIDISATION OF WORK AND SELF-EMPLOYMENT: PROBLEMS FROM A SOCIAL POLICY POINT OF VIEW
Uwe Fachinger

Abstract:
Hybridisation of work is a key social issue as very different forms of social protection and labour law treatment result from different forms of employment. Insufficient social protection will invariably lead to an increase of people exposed to social risks. Against this background of the growth of hybrid employment, the paper focus the financing of social security, especially aspects of willingness and ability so save. It is shown, that for each social risk and for each form of serial or synchronised hybrid employment, the situation regarding the protection against social risks has to be analysed in detail.

Keywords: social insurance, hybridisation, social risk

JEL Classification: D14, J21, H55

INTRODUCTION

It is a common understanding that many self-employed people do appreciate their professional life. Self-employment is seen as having the freedom of choice encompassing i.e., how to work, where to work, when to work, how long to work, for whom to work, and with whom to work or to cooperate. Due i.a. to the processes of digitalisation and tertiarisation the opportunities to become self-employed have drastically increased as e.g. the costs for market entrance have decreased and new work opportunities of click-working and in the so-called gig or platform economy have emerged. This has not only led to an increase in self-employment without personnel (solo self-employment) but also to an increase in hybrid employment.

Hybrid employment is defined as forms of employment, which are characterised by
(i) multiple switches between independent and dependent work (serial hybridisation) during once working life and
(ii) different forms of multiple employment and combinations of dependent and independent work during the same time period (synchronous hybridisation).

The often-used dichotomy in describing the labour market—self-employed people on one side and dependent workers on the other side or standard work versus non-standard work—is less and less suitable to characterise the changing structure of the labour market as a basis to develop adequate political measures of social policy (Bogliacino, Codagnone, Cirillo, & Guarascio, 2020; Holts, 2018: 20).

The changing structure of the labour market, the changes in employment relationships, the plurality of employment, and hybridisation is a key social issue as very different forms of social protection and labour law treatment result from different forms of employment (Brunetti et al., 2019; Holts, 2018: 20 ff.). Independent of the form of employment the occurrence of a social risk during working life leads i.a. to a break of employment, loss of income, and in some cases such as illness to additional financial burdens.

Social security systems are very heterogeneously constructed. There exist different objectives (e.g. maintaining once living standard or avoiding poverty and social exclusion) and measures. Therefore, one has to look at the specific construction of different systems and their elements when analysing the insecurity of hybrid workers dealing with the occurrence of social risks.

Given the increasing number of hybrid employment, insufficient social protection will invariably lead to a rise in the number of people exposed to social risks. This will result in increasing poverty and a rise in the number of people suffering from social exclusion.

The paper focus the financing of social security. The aspects of willingness and ability so save are problematised. Regardless of the specific structure of a social security system, people have to save if they want to have an insurance against the risk of longevity. Whether the system is private or public or whether the system is pay-as-you-go or capital funded does not make any difference. Assessment basis, contributions and tariff rates, guarantee of regularly recurring payments, and problems of premium adjustments will be discussed in more detail.

1 University of Vechta, Germany
2 A lot of research has been carried out regarding the development of the structural changes of the labour market due to digitalisation and its consequences. The on-going debate is extremely vast and it is not possible to go through it here, see for example Oyer, 2020; Bogliacino, Codagnone, Cirillo, & Guarascio, 2020; Brunetti et al., 2019; Gassmann & Martorano, 2019; Wood, Graham, Lehdonvirta, & Hjorth, 2019; Howcroft & Bergvall-Kåreborn, 2019; Codagnone et al., 2018; Choudary, 2018; Holts, 2018; Huws, Spencer, Syrdal, & Holts, 2017; Work and Pensions Committee, 2017; De Stefano, 2016; International Labour Office (ILO), 2016.
COVERAGE OF SOCIAL RISKS

In principle, making provisions means financial insurance for coping with income losses or with additional financial burdens in the context of the occurrence of a social risk. Social risks are social relevant situations, which are of consequences for individuals, households and families and which give reasons for political measures. What situations are thought of relevant varies with space and time. For example, at present in Germany the following situations are presumed to be social risks:

- Health care and sickness
- Invalidity
- Accident at work and occupational diseases
- Long-term care
- Old-age (biometrical risk of longevity)
- Survivors
- Maternity
- Unemployment

In Germany, most employees are mandatory insured in the social security system against those risks e.g. to avoid negative external effects. Additionally – by analogy with unemployment – following social risks exist for self-employed people:

- lack of orders
- shortfall of payment
- bankruptcy

The occurrence of one of the listed social risks leads to a break in employment, to income losses and – in cases such as sickness- mostly to an additional financial burden. Furthermore, the risks are not independent of each other. For example, a longer period of illness or an accident at work can lead to unemployment or – in case of self-employment – to lack of orders. Therefore, the accumulation of risks has to be

Unfortunately, not all social risks are covered by social security systems or are insurable. For example, for self-employed people there exist no insurance against bankruptcy. Furthermore, the insurance of social risks may be not possible in certain cases. For specific risks such as maternity or lack of order, there exist no insurance market. Furthermore, a selection of risk takes place on insurance markets. This means on one hand risk-oriented premiums and on the other hand partial or total systematic exclusion of specific types of risks because of a higher potential risk.

Taking a look at the social insurance of people with hybrid employment for each social risk it can be distinguished between six cases, which are not mutually exclusive. The provision could be – voluntary or mandatory – carried out in the first employment (quadrant I in Figure 1) and/or in a further employment (quadrant III in Figure 1). If there exist no insurance in the first employment (quadrant II in Figure 1), further employment can lead to a provision (quadrant III in Figure 1). However, it is possible that – even in case of a full-time or part-time employment – no social insurance exists (quadrant IV in Figure 1). Furthermore, the insurance has not to be once own but derived entitlements could exist (quadrant V in Figure 1).

Figure 1: Cases of provision against social risks via social insurance

<table>
<thead>
<tr>
<th>Social insurance</th>
<th>Insured</th>
<th>Not insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Employment</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Further employment</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>Derived entitlements</td>
<td>V</td>
<td>VI</td>
</tr>
</tbody>
</table>

Source: Author’s representation.

In Figure 1, problematic cases are identifiable (Joyce, Stuart, Forde, & Valizade, 2019; Berg, 2016; Strom & Schmitt, 2016; Gassmann & Martorano, 2019; Choudary, 2018; Codagnone et al., 2018: 49 ff.). For example, it can be assumed that it would be problematic if no social insurance exits in connection with the first employment

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3 In 1994 the long-term care insurance was introduced.
4 First employment is defined as the employment with the most working hours per week, normally done as full-time work.
(Quadrant II). In such cases, it would be possible that a provision against social risks exists in connection with further employment (III) or that derived entitlements exist (V) and people are reliant on the partners claims\(^5\). The most problematic case would be where no social insurance exists at all. In such a case, the person has to choose whether or not to cover a social risk and is free to take up an risk insurance, considering all the opportunity costs.

However, Figure 1 is just a snapshot of a situation in time. For people with hybrid employment the status of social insurance can change. For example, the labour status of a person can change from employee to self-employed or vice versa in the first employment as well as in the further employment at any point in time. The consequences of such changes regarding the insurance of social risks can be very serious, depending on the social security system.

- It could lead to a restriction or even a loss of the insurance of a specific social risk, where compensation or substitution may not always be possible. The coverage of the insurance may deviate, which is often overlooked in the political discussion or scientific debate. For example, in Germany, the statutory pension system covers the risks of old age, survivors, and invalidity. In the private insurance market, to cover those social risks, one has to take out three different insurances. There is even the danger that it is not possible to insure against the risk of invalidity, depending on the occupation and pre-existing conditions. Moreover, for specific occupational groups it is not possible to take out an invalidity insurance in the private market at all.

- Additionally the consideration of the time dimension regarding benefits is important. In some social security systems, a qualifying period exist to receive benefits, which can lead to a loss of all entitlements by a change of employment status.

- Furthermore, there is the problem of a lack of flexibility. Parallel work as employee and as self-employed may lead to a dual insurance of a single social risk with a corresponding high financial burden. This can happen e.g. if the employment status changes in the first employment from self-employment to dependent employment with a mandatory insurance in a statutory old age pension system. In such case, additionally to the private insurance of the risk of longevity (old-age insurance) to cover the risk during the self-employment phase, a mandatory insurance in the statutory pension system may exist. This may lead to payments of contributions to the private old-age insurance and additionally to the statutory pension system, if an adaption in the private insurance is not possible.

- The general conditions and the regulatory framework are changing over time. Nevertheless, people made their decisions considering the regulation at a specific point in time. This is problematic, as afterwards an adjustment is partially or in total not possible and even if it normally goes hand in hand with higher costs.

A drastic example is the paradigm shift in the old-age security scheme in Germany\(^6\).

The stated examples show, that for each social risk and for each case in Figure 1, the situation has to be individually examined. The decision to change the employment status and/or doing parallel work may have tremendous consequences for the coverage of social risks. For example, self-employed and employee status have very different implications in terms of social security. In countries with a fully developed social security system as in most states of the European Union, the self-employment status generally provides lower social protection than open-ended employment contracts, e.g. in terms of social insurance against unemployment, accidents or occupational diseases. The freedom of choice, which may come through the hybridisation by digitalisation, goes hand in hand with the insecurity of insurance against social risks (Joyce, Stuart, Forde, & Valizade, 2019; Codagnone et al., 2018: 60 ff.).

Person in hybrid employment may be unable to adequately hedge against social risks due to lesser or even missing integration into the social security system and lower stability of employment (Joyce, Stuart, Forde, & Valizade, 2019; Holts, 2018; Broughton et al., 2018; Lepanjuuri, Wishart, & Cornick, 2018; Huws, Spencer, Syrdal, & Holts, 2017). People may not be integrated into occupational health care and pension systems because they are not working full-time or working as contract or temporary workers. Additionally lower monthly income due to e.g. lower working hours lead to lower entitlements in income related systems concerning old-age pensions or unemployment and health care cash benefits\(^7\).

In such cases, people have to rely on products of private insurance markets. As the principles of private insurances and statutory social security systems are very different, it is not always possible to compensate for a loss of social protection by the statutory social insurance system. This aspect will be discussed in further detail in the following, showing, that with rising hybridisation and freedom of choice of employment, also the overall insecurity regarding the provision against social risk may increase.

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\(^5\) For example due to their partner’s workplace pension or in case of eligible dependants (spouse and children) in the statutory health care system in Germany.

\(^6\) Schmähl, 2003

\(^7\) This also leads to lower revenues for the institutions of social security and may even lead to an erosion of their financing base. As this cannot be discussed in more detail see Fachinger & Belz, 2019 and Fachinger, 2007.
ABILITY AND WILLINGNESS TO SAVE

Independent of the specific structure of social security systems, people have to save if they want to have an insurance against social risks. Whether the system is private or public or whether the system is pay-as-you-go or capital funded does not make any difference. However, the ability to save is crucial, as even with a high willingness to save, it poses a necessary condition for financial precautions. Contributions and tariff, guarantee of regularly recurring payments, and problems of premium adjustments are major aspects, which people have to deal with.

Income

The starting point for the discussion of the ability and willingness to save is the income out of the specific occupations. The case where a person is statutory insured due to the first employment and the income is high enough to accumulate adequate entitlements in earnings-related benefits, e.g. in the case of unemployment or retirement, would be unproblematic. If people have limited financial capabilities the opportunity costs of an insurance against social risks maybe too high – and the costs are the higher, the lower the income even if the contributions are earnings-related (Broughton et al., 2018: 53 ff. and 97 ff.; Lepanjuuri, Wishart, & Cornick, 2018; Wood, Graham, Lehdonvirta, & Hjorth, 2019; Berg, 2016). This may lead to avoidance of risk provision or to underinsurance.

It is well known, that people with more than one employment (synchronous hybridisation) carry out further jobs mainly to supplement their main household income because of low income out of the first employment (Broughton et al., 2018: 53 ff. and 97 ff.). If income from further employment is needed to help to cover the cost of living and to pay rent and bills, it will be difficult to pay additional contributions for the insurance of social risks.

Contributions and tariff

The definition of contributions and tariffs are central aspects in determining the ability to save. It has to be distinguished between income-related contributions and lump sum payments. If the contributions are income-related, the percentages stay the same for each income. This is normally the case in statutory insurance systems. If the contributions are a fixed amount, the absolute burden is the same for each income, which is the case e.g. in risk-oriented premiums in private health- or life-insurances. The differences in the respective tariffs are presented in Figure 2 strongly stylized and typified⁸.

Figure 2: Cases of provision against social risks via social insurance

![Figure 2: Cases of provision against social risks via social insurance](image)

Source: Author’s representation.

⁸ The data are 18.6% for income related contributions and 592.41 Euro for risk-oriented premiums. 18.6% is the contribution rate for the statutory pension insurance in Germany and 592.41 Euro is the regular contribution for self-employed people, who are obligatory insured in the German statutory pension insurance.
Whereas the ability to save could be directly taken into account by income related contributions, by risk-oriented premiums the contribution depends on the individual risk at the time of signing the contract. For the same risk, the absolute amount of the contributions are the same. By contrast, the relative amount is the higher, the lower the income, i.e. the relative financial burden will rise disproportionate with decreasing income. Therefore, it is possible to avoid the disproportionally high financial burden by risk-related payments with income-related contributions, to further the ability to save and to influence the willingness to save in a positive way.

**Adjustment of premiums and contributions**

The definition of a tariff must include a method for the adjustment of the contribution rate or the absolute value over time. Adjustments of the financial structure may be necessary because of changes of general conditions such as macroeconomic development, transformation of the employment structure, or socio-demographic changes. Therefore, contributions for statutory social security systems and for occupational or private social security schemes are changing over time. To give an example, the changes of the contributions of the statutory health insurance and the average change of contributions of the private health insurance companies are shown in Figure 3.

**Figure 3: Increase of contribution for health insurance in %, Germany, 2000 to 2020**

As can be seen in Figure 3, especially the average contribution of the private health insurance increases markedly sometimes by more than 7.0%. People are not able to anticipate such changes, but they affect immediately the ability to save. An average increase of 7.27% in 2010 can hardly be compensated by an increase of income. Furthermore, the increase is based on the premiums and does not reflect the actual financial burden from an individual point of view. As stated above, such an increase leads to a disproportionally high burden for low income earners: the lower the income, the higher the burden.

But the amount of contributions not only affects the ability to save but also the willingness. It is presumed, that people do not accept high contribution rates above a specific ceiling. This is one political argument for establishing e.g. an upper limit of 22% for the contribution rate of the statutory pension insurance in Germany. However, there exist on objective criteria regarding the acceptance of a financial burden of social security schemes. For example, in Germany at present the contribution rate for the statutory pension insurance is 18.6%, whereas the contribution rate for the Miners’ Pension Insurance within the German Pension Insurance Fund for Miners, Railway and Maritime is 24.7%. This is 2.7 percentage points higher than the contribution rate of 22%, of which is seen as unacceptable.

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9 Paragraph 154 Section 3 Number 1 Sozialgesetzbuch VI (Social Code Book).
10 Deutsche Rentenversicherung Bund, 2019a.
Guarantee of regular recurring payments

Not only the relative and absolute amount of the financial burden is relevant for the ability to save, but also the continuity of financing especially by risk-oriented contributions such as premiums for private health or life insurances. Normally contributions have to be paid periodically – often every month. Therefore, a steady income stream is relevant to ensure adequate risk protection. The higher the income mobility, the higher the probability of being not able to pay fixed contributions regularly, and the lower the ability to save.

It is thought, that if the hybrid employment consists partially of self-employment, marginal employment, contract work or of other forms of non-standard work, the income stream will be unstable (Brunetti et al., 2019; Holts, 2018: 21 f.; Huws, Spencer, Syrdal, & Holts, 2017; Berg, 2016; Lepanjuri, Wishart, & Cornick, 2018; Broughton et al., 2018: 49 ff.; De Stefano, 2016). People in such employments with high income mobility will have problems to ensure a steady income stream from which risk-oriented fixed contributions for the insurance of social risks could be paid. To deal with such problems, in statutory social insurance schemes contributions are earnings related, sometimes between a lower and an upper threshold. This makes it easier to deal with income mobility as long as the income is above the lower ceiling.

Assessment basis

The definition of the assessment basis is a central aspect in determining the ability to save especially in earnings-related contribution. The broader the income concept, the higher the financial burden of the person. In statutory insurance systems, usually a specific earned income is used as assessment, e.g. gross wages out of insured dependent employment – sometimes even between a lower and an upper threshold –, and unearned income is not included11. If other income components are used as assessment basis additionally, such as income out of self-employment, the overall financial burden will increase and the ability to save will decline.

Modification of the assessment thresholds, for example an adjustment to the overall increase of earnings, will have manifold effects on the financial burden of households. For example, it may lead to falling out of the statutory insurance, if the income for assessment lies below the increased lower threshold12.

Another problem may occur, when people work in the gig- or platform economy and are paid in cryptocurrency or in credits to be spent on platforms. Neither in statutory social security systems, nor in private insurances against social risks cryptocurrencies or credits are accepted and such payments are by no means used as an assessment basis.

Final remarks

Having the ability to save does not mean that people are willing to save (Codagnone et al., 2018: 87 ff.). The willingness to save depends not only i. a. on individual risk-preferences, myopia (Codagnone et al., 2018: 45), or financial literacy (Elliehausen, 2019; Bongini, Colombo, & Iwanicz-Drozdzowska, 2015; Stolper, 2018), but also on knowledge about the legal framework or institutional regulations regarding social provision as well as the status of the insurance market to name a few (Codagnone et al., 2018: 87 ff.). The willingness to save is also influenced by period effects such as financial crises13, pandemics14 and legal changes15, or unexpected changes of personal circumstances e. g. unemployment, accident, divorce, death of husband or wife, or birth of a child.

SUMMARY

The rising hybridisation of work will become a complicated and serious issue with respect to the provision against social risks. The heterogeneity and instability of employment situation – having more than one job at a time or being employed and working parallel in a specific form of (self-)employment on platforms, and the change of employment status – may lead to inadequate insurance or even to a loss of entitlements and coverage.

Whether and for whom the level of social protection and coverage is inadequate has to be analysed in more detail across all types of social risks considered. For each social risk and for each form of serial or synchronised hybrid employment, the situation regarding the protection against social risks has to be analysed. Which aspects

11 For an overview see e.g. https://www.missoc.org/missoc-database/comparative-tables/.
12 For example, in 2013 in Germany the lower threshold for mandatory insurance in the statutory pension insurance was increased from 400 € to 450 € (Deutscher Bundestag, 2012: 2474).
14 For example the so called Corona pandemia in 2020
15 For example the introduction of the statutory long-term care insurance in Germany in 1994.
are relevant for the identification of challenges concerning the provision against social risks in case of hybrid employment shows Figure 4 in a schematic manner.

Figure 4: Dimensions of the analysis of social policy

<table>
<thead>
<tr>
<th>Political objectives</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. increase of social welfare, maintaining once living standard, guarantee of sustainable provision of health and long term care</td>
<td></td>
</tr>
<tr>
<td>e.g. compulsory insurance, earnings-related contributions, tax incentives</td>
<td></td>
</tr>
<tr>
<td>Status quo</td>
<td></td>
</tr>
<tr>
<td>e.g. number of insured people, development of demand, pension level, ability and willingness to save, coverage of health insurance</td>
<td></td>
</tr>
</tbody>
</table>

Source: Based on Schmähl, 2009: 121 f.

The challenges have to be seen against the background of the specific political objectives and can be identified on the basis of a status-quo analysis by means of a target/performance comparison, which should encompass the development to date as well as the future development. If deviations are identified, the derivation of adequate measures is possible taking into account the political objectives. Which factors should be considered are in principle determined by the status-quo analysis, which may also give an explanation for the actual status and may help to identify the relevant determinants, their direction of influence and interaction.

Overall, a holistic analysis is necessary to decide whether and how a reform of social security systems are necessary to make them more responsive to the needs of the increasing hybrid workforce. Against the background of the development of hybridisation, much further research is needed to obtain a more complete picture of coverage of hybrid employed people against material losses caused by the occurrence of social risks. On the basis of such analysis adequate measures of social protection for all kind of heterogeneous forms of employment could be developed to close existing gaps in terms of social security.

REFERENCES


ESTIMATION VAT GAP IN ROMANIA AND EU – INDICATOR FROM TAX EVASION

Camelia Ancuta Catana¹

Abstract:
Following the economic downturn as a result of the global financial crisis of 2008 and the adoption of a strategy based on economic austerity, by most EU countries, more attention has been paid to the problem represented by the fiscal gap. This report explains the terms "tax evasion" and "VAT gap" and briefly describes the calculation methods used in the literature to quantify the VAT gap in different countries of the European Union. Although the VAT difference thus estimated is not caused solely by tax evasion, it could serve as an indicator of it. In addition, it offers a review of the various studies that analyze the evolution of the size of the VAT gap and summarize the results of these empirical studies. The main purpose of this article is to carry out an analysis for EU Member States, during the selected years (2009 and 2017) for which VAT difference data were available. It was found that for the entire period analyzed, there are two common factors that influence the VAT difference in the countries examined, these being the final consumption of households and non-profit organizations in each state, with a positive impact on the VAT gap and the fact that the decrease of VAT rates is not directly proportional to the decrease of the VAT Gap.

INTRODUCTION

Tax evasion is one of the most complex economic and social phenomenon of major importance facing modern states today, in a continuous evolution, with difficult consequences for the assessment of the economic and social environment, its eradication being practically impossible.

The phenomenon of tax evasion in Romania and other EU countries, in its many forms of manifestation, still requires research and analysis to achieve a correct and complete perception of its dimensions, as long as those involved in obtaining the "finished product" generated by this phenomenon find increasingly complex and sophisticated ways of breaking the law covered by the scope in the field, trying to provide a legal aspect to the activities managed.

The existing context of globalization and rapid technological development, the intensification of intracommunity commercial transactions, the economic crisis whose effects are still felt the presence or the exponential growth of the digital economy are only a set of conditions that have led to the intensification and extension of the forms of evasion.

Tax evasion, through many forms of manifestation, affects the capacity to form state revenues. Currently, the governments of Romania and other European countries are faced with difficulties in mobilizing financial resources for the public sector.

For Romania, one of the former communist countries, that have experienced a difficult transition to the market economy, the significant increase in tax evasion has strong influences on the national economy. The tendency to have an evasive behavior often comes from simple games of interest. Whatever the level of taxation, higher or lower, people, by their nature, always have the tendency to put the personal interest on the first plane and only the general interest on the secondary plane. In most cases, taxpayers are inclined to consider taxes more than a legitimate contribution to public spending, as opposed to the goods and services provided by public authorities, and not to look with good eyes on those trying to reduce their income. Thus, from the beginning, taxpayers have tried to reduce their tax obligations through increasingly ingenious means.

Although, the VAT difference is not necessarily a measure of VAT fraud, because it can include unpaid VAT due to legal tax planning or unpaid VAT due to the insolvency of the payer, quantifying the VAT gap is useful to show the size and trends of this gap, as an indicator of potential VAT evasion. In addition, the larger VAT gap could also occur in economies where the tax authorities are not functioning effectively.

The results presented in this report show the relationship between the size of the tax evasion identified in EU countries and its negative impact on GDP formation, the need to adapt the legislative framework in relation to the dynamic evolution of economic relations.

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The paper presents the usual definitions of the terms tax evasion, VAT gap, generally accepted and presented in the annual studies prepared at the request of the EU Commission (CASE) regarding VAT gap estimation, estimation methods and descriptive statistics regarding VAT gap estimation, in Romania and the EU.

**VAT GAP AND TAX EVASION – DEFINITION, CONCEPT**

*Tax Evasion – Definition, Concept*

Tax evasion is a very difficult concept to express, and there is no clear definition of tax evasion. If it is spoken about fraud, it is also about legal or legitimate fraud, illegal fraud, international evasion, legal and illegal evasion, tax havens, corruption and the underground economy, the freedom to choose the lower tax or tax understatement.

Etymologically, the term evasion comes from the term "evasio" in Latin, which means escape. In the literature, there are many approaches to define tax evasion. A broadly accepted definition is that "Tax evasion is a legal obligation to minimize tax liabilities and by means of full disclosure to the tax authorities or arrangement financial affairs for the purpose of reducing obligations under the law" (Oxford Dictionary, Cambridge, 2017).

The approach of the concept of tax evasion, taking into account the interpretations given in the application of legal regulations, closely related to legal tax evasion and tax fraud, allows a complex analysis of the phenomenon and the changes of the tax system, which influence the determinants of tax evasion. Kirchler considers tax evasion a form of deliberate underreporting of income or claiming unwarranted tax deductions.

In my point of view, tax evasion is the avoidance, in whole or in part, of taxation and can be achieved in different ways: by interpreting the tax legislation in favor of the taxpayer by concealing the taxable object consisting of undervaluing its amount or by violating the legal provisions.

Regarding the way in which it can be realized, the relationship between the analyzed phenomenon and the legislation in force, tax evasion has two forms of manifestation:

- Tax avoidance (made under legal provisions);
- Tax evasion (fraudulent) or tax fraud (tax evasion).

Legal tax evasion should be considered as that tax evasion that manages to avoid the payment of tax liabilities (in whole or in part) by exploiting certain "loopholes" of the law. The so-called legal tax evasion is considered to be the way in which the taxpayer seek to place himself in the most favorable position to benefit as much as possible from the advantages provided by the tax regulations.

As far as illegal tax evasion is concerned, here things are obvious: any violation of the fiscal norm, which is capable of harming the financial interests of the state, must be qualified as representing illegal tax evasion. The fraudulent tax evasion consists in concealing the taxable object, in underestimating the amount of taxable matter or in using other ways or means of subtracting from the payment of the tax due.

Reality demonstrates that tax evasion is far from being perceived correctly and completely, so that mechanisms designed to prevent and combat it are far from effective. One of the broadly accepted and most commonly used definitions considers that tax evasion represents "those economic activities and the income derived from that circumvent government regulation, taxation or observation".

Such activities are deliberately concealed by public authorities to avoid payment of income, value added or other taxes and social security contributions, or to avoid compliance with certain legal standards of the labor market, such as minimum wages, maximum working hours or safety standards and other administrative procedures.

The tax evasion is also divided into the identified tax evasion, by public authorities with attributions in the field, respectively unidentified tax evasion. The ratio of tax evasion identified is far too small compared to the overall tax evasion, including tax evasion in the underground economy, unidentified tax evasion. The underground economy exists in all countries of the world, being found in different proportions in GDP.

In the opinion of some authors (Schneider, F. Buehn, A, Shadow Economy: Estimation Methods, Problems, Results and Open questions, 2017) the forms of tax evasion can be classified in relation to the economic activities that generate them, as follows:
Table 1. A taxonomy of types of underground economic activities

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Monetary transaction</th>
<th>Non-monetary transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Illegal Activities</strong></td>
<td>Trade with stolen goods; drug dealing and manufacturing; prostitution; gambling; smuggling; fraud;</td>
<td>Barter of drugs, stolen goods, smuggling etc. Producing or growing drugs for own use. Theft for own use.</td>
</tr>
<tr>
<td><strong>Tax Evasion</strong></td>
<td>Unreported income from self-employment; wages, salaries and assets from unreported work related to legal services and goods</td>
<td>Employee discounts, fringe benefits</td>
</tr>
<tr>
<td><strong>Tax Avoidance</strong></td>
<td>Barter of legal services and goods</td>
<td>All do-it-yourself work and neighbor help</td>
</tr>
</tbody>
</table>

Source: Structure of the table is taken from Lippert and Walker (1997, p.5) with additional remarks provided by Schneider and Buehn (2017, p.2).

The ways in which tax evasion manifests are closely related to the type of tax or tax affected.:  
- tax on income and income tax (direct taxes);  
- turnover tax and value added tax (VAT);  
- social security contributions;  
- special taxes – excises goods (tobacco, coffee, energy products).

In this paper, we will analyze the tax evasion mainly from the point of view of the VAT GAP indicator - the deficit of VAT collection, caused by the techniques of subtraction from the payments to the public authorities of this type of tax.

**VAT Gap – Definition, Concept**

Value added tax (VAT) is a relatively stable source for foundation public budgets and, at the same time, one of the main sources of income for budget formation. According to the European Commission (CASE, 2019), VAT revenues in 2017 in EU Member States represented on average about 7.1% of GDP and about 22% of total tax revenues. VAT has been introduced by most states (about 150) since 1950 and is currently considered one of the most efficient taxes. The relatively easy mode with which it is collected and paid by the final consumers, respectively, has led to its labeling as a "money machine", a name used in the debate on the introduction of VAT in the United States.

There are various definitions of the terms "VAT fraud and evasion". The institutional definition of tax gap has been given by the Internal Revenue Service (IRS) and HMRC, and it represents the difference between what the taxpayers should pay and what they actually pay on timely basis. In this paper, I used these terms as defined in the European Commission report “The concept of tax gaps” (2018):  
**VAT evasion** generally comprises illegal arrangements where tax liability is hidden or ignored, i.e. the taxpayer pays less tax than he/she is supposed to pay under the law by hiding income or information from the tax authorities.  
**VAT fraud** is a form of deliberate evasion of tax which is generally punishable under criminal law. The term includes situations in which deliberately false statements are submitted or fake documents are produced. It is organised fraud and includes national and cross border transactions.

There is no applicable general definition of VAT evasion in EU law. The meaning of the term evasion / fraud depends on the legislative interpretation given by the national administrations or the economic context in which it is used. Usually, VAT evasion refers to the deliberate under-declaration of taxable transactions, but it can also cover the non-declaration of taxable transactions related to concealed legal and illegal economic activities. With the regulation of the European single market and free trade, in the field of VAT evasion, a great extent has registered the so-called carousel fraud, from intracommunity transactions, carried out in the territory of several states, sometimes known as a criminal attack on the VAT system. (HMRC, 2014).

Starting with 2009, studies on the deficit of collecting value added tax (VAT) are carried out at European Union level. The quantification of VAT gap is relevant for both the Union and the Member States, as the value added tax is the indirect tax which has a substantial contribution to the Union budget and to national budgets. Most EU Member States have developed and implemented their own methodology to assess fiscal deficits based on data from annual accounts, while other Member States, for example, Romania is in the process of developing a methodology to calculate the national tax deficit.
Information on the size of the tax gaps, quantified by more or less accurate methods, can be used by tax administrations and governments to evaluate the phenomenon of tax non-compliance of taxpayers, as well as the need to improve fiscal policy and tax administration.

The VAT receipts deficit is defined as the difference between the total obligation to pay the VAT due to the budget and the amount actually collected at the budget (Center for Social Economic Research, *Study and Reports on the VAT Gap in EU-28 Member States*, 2019). It can be expressed in absolute or percentage terms. The total VAT that should be collected is established on the basis of the obligations from the tax declarations, drawn up according to the tax legislation in force.

The deficit of VAT receipts expressed in the absolute report reflects the VAT collected, declared and unpaid by the economic agents, as well as an estimate of the loss of VAT revenues as a result of fraud and evasion, bankruptcy, insolvency, fiscal optimization, as well as erroneous calculations. EU Commission considers that reducing this deficit, starting from the estimation of the deficit and analyzing the factors that influence the size of the deficit, is an important element in the strategy to combat tax evasion.

For the most accurate quantification of the VAT gap, it is proposed to calculate it as representing the difference between the theoretical tax obligation and the tax collected effectively, where the theoretical fiscal obligation is defined as the tax applied and due accordingly in accordance with the legislation in force, as specified by the HMRC (2014). This VAT gap includes not only the evasion caused by the carousel fraud, mentioned above, but also the tax evasion resulting from the underground economy, possibly different errors, as well as the taxes not paid due to the insolvency.

**Methods of Estimating the VAT Gap**

The VAT gap recorded in the collection of state revenues is influenced by several economic, social or other factors. A factor with a direct influence on the size of the VAT gap is represented by tax evasion and fraud, while other reasons that determine the registration of a VAT gap include avoiding / reducing taxes, bankruptcies, insolvencies, errors in calculating and declaring tax obligations, as well as VAT liabilities canceled or deferred.

According to Reckon's study (2009), there are two methods used in the calculation of the VAT Gap, namely the "top-down" approach and the "bottom-up" approach.

In the case of the first method, the total VAT revenue is calculated which should be collected from the state budget. This income comprises the value added tax applied to several categories of consumption, such as: final consumption of households and non-profit institutions serving households, government consumption, intermediate consumption and gross fixed capital formation.

The second method consists in estimating the components of the VAT deficit. In this case, it is proceeded to estimate the VAT revenues declared incorrectly, as well as the declared but not collected revenues will be estimated. This method of calculating the gap is difficult because estimates of the volume of tax evasion are difficult to make.

The most used approach to calculate the value added tax is "top-down". The tax collected can be estimated based on the statistics on the tax revenues expressed in ESA standards or on the income data from the databases of the national tax administration. It is also possible to mainly use ESA data and supplement it with data from the tax authority, where necessary, to obtain a more accurate estimate for the purpose of determining the VAT difference at a state level.

The most important category of consumption, in terms of weight in total final consumption, is the final consumption of households.

After calculating the total VAT payment obligation, the level of the collection deficit (GAP) is calculated according to the formula:

\[
\text{VAT gap} = (\text{total amounts of VAT theoretically collectable based on the applicable tax law}) - (\text{total amounts of VAT actually collected})
\]

Theoretical or ideal VAT (VATₜ) represents according to the author Cuceu et al. (2017) the tax that is obtained by applying a single (standard) VAT rate to the entire final consumption. National accounts express final consumption in market prices (including VAT); furthermore, the theoretical tax may be estimated by applying the legal standard rate (t) to the net final consumption, estimated as the difference between gross final consumption (FC) and actual
VAT receipts (VATₑ), this particular methodology being similar to the one found in OECD (2014).

\[ VATᵢ = (FC - VATₑ) \times t \]

In absolute terms, the Total VAT Gap may be determined as a difference between theoretical VAT (VATᵢ) and effectively collected VAT (VATₑ):

\[ Total \ Gap = VATᵢ - VATₑ \]

For this method, the most important category of consumption, in terms of weight in total final consumption, is the final consumption of households.

Figure 1. Structure of VAT Total Tax Liability - VTTL, in EU-28 Member States, 2017

From the analysis based on data available at the level of 2017 for EU countries (CASE 2019), VAT for domestic consumption represents only about 64% of the total potential tax. A fairly large share of the total potential tax is held by the intermediate and government consumption tax (around 20%), then the tax on gross fixed capital formation (FCF) (about 14%).

Keen (2013) deals with the decomposition of the C-efficiency Ratio (VAT efficiency based on consumption) in two parts: the compliance gap and the policy gap. Thus, the Total VAT Gap could be expressed by adding up the Policy VAT Gap (indicating VAT revenue losses caused by the use of exemptions and reduced VAT rates) and the Compliance VAT Gap (due to tax evasion, but also due to some other causes such as insolvency, bankruptcies, legal tax optimization):

\[ Total \ Gap = Policy \ Gap + Compliance \ Gap \]

\[ Policy \ Gap = VATᵢ - VATᵢp \]

\[ Compliance \ Gap = VATᵢp - VATₑ \]

where VATᵢp = potential value added tax.

The data used by the EU for estimating VAT differences are usually collected from the National Bureau of Statistics (for example, input-output tables) and from the national tax administration (for example, data on VAT refunds). Therefore, to obtain reliable estimates / results, data quality and accuracy are very important. In most EU Member States, the data transmitted is in Excel, only a few Member States use specialized software.

However, since the exact level of the unobserved economy is difficult to estimate and to be incorporated into national accounts, the actual scale of VAT evasion may differ from the estimated values in the VAT gap.

RESULTS AND DISCUSSION

Value added tax is applied in the territory of the European Union, more precisely in the territory of the Member States where the Treaty on the Functioning of the European Union is applied.

Operations performed in the European Union must cumulatively meet certain criteria in order to be subject to value added tax, such as:
a) the object of value added tax must be represented by the delivery of goods and / or the provision of services performed on a payment basis;
b) the delivery of goods and the provision of services are to be carried out within the territory of the Member States;
c) the delivery of goods and the provision of services shall be performed by taxable persons;
d) the goods delivered and the services provided are the object of the economic activities.

Descriptive Statistics on the Estimation of VAT Gap in the European Union

Standard and reduced quotas at European Union level are transposed in table 2.

<table>
<thead>
<tr>
<th>Member State</th>
<th>Standard Rate (SR)</th>
<th>Reduced Rate (s) (RR)</th>
<th>Effective Rate</th>
<th>Member State</th>
<th>Standard Rate (SR)</th>
<th>Reduced Rate (s) (RR)</th>
<th>Effective Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>20</td>
<td>10/13</td>
<td>11.2</td>
<td>Italy</td>
<td>22</td>
<td>5/10</td>
<td>10.2</td>
</tr>
<tr>
<td>Belgium</td>
<td>21</td>
<td>6/12</td>
<td>10.3</td>
<td>Latvia</td>
<td>21</td>
<td>12</td>
<td>12.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>20</td>
<td>9</td>
<td>14.1</td>
<td>Lithuania</td>
<td>21</td>
<td>5/9</td>
<td>13.4</td>
</tr>
<tr>
<td>Cyprus</td>
<td>19</td>
<td>5/9</td>
<td>10.3</td>
<td>Luxembourg</td>
<td>17</td>
<td>8</td>
<td>11.6</td>
</tr>
<tr>
<td>Croatia</td>
<td>25</td>
<td>5/13</td>
<td>16.5</td>
<td>Malta</td>
<td>18</td>
<td>5/7</td>
<td>10.1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>21</td>
<td>10/15</td>
<td>12.9</td>
<td>Poland</td>
<td>23</td>
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Source: TAXUD, VAT Rates Applied in the Member States of the European Union: Situation of 1st January 2017

Denmark is the only country in the EU that applies a single VAT rate, the standard rate (SR), in all other states being used and reduced rates for certain categories of goods or services. Between the standard VAT rate (SR) and the effective rate, taken into account by the studies carried out by the EU Commission, there is no directly proportional relationship.

The average standard rate for the 28 EU member states based on the standard rates applied in 2017 is 21.46%.

In addition to the VAT rates presented, the VAT gap also takes into account the income from non-taxable activities. The highest standard VAT rate is 25% and is found in three states - Denmark, Sweden and Croatia. The lowest standard VAT rate is in Luxembourg - 17%, followed by Malta - 18% and three countries with 19% - Cyprus, Germany and Romania.

In order to calculate the VAT collection deficit at the level of EU member states, the VAT obligation is estimated for the final expenses of the household, the government and the non-profit associations; VAT not deductible from intermediate consumption of exempt industries; and VAT related to investments in fixed assets in exempt sectors. Also, the country-specific tax regulations, such as exemptions for small entities, the values established for turnover below the VAT thresholds (if applicable) are taken into account; non-deductible business expenses for food, drinks and accommodation; and restrictions on the VAT deduction for cars, among others.
In the data presented in the Reports prepared annually by CASE at the request of the EU Commission, including those related to 2017, the concept of VAT Gap (in absolute terms) was measured as the difference between the potential VAT (VAT Total Tax Obligation - VTTL - which is the theoretical tax due according to the law, estimated using the national accounts ESA10) and the effective VAT (actual revenue collected). Therefore, this study considers the concept of VAT Gap as the so-called "Compliance Gap" and not the total of the gap (Cuceu et al., 2017).

From the analysis for 2017, it is observed that the highest values of the VAT deficit (in relative terms) were estimated in Romania (36%), Greece (34%) and Lithuania (25%), and the lowest percentages of The VAT deficit (in relative terms) was recorded in Sweden, Cyprus, Hungary and Luxembourg (about 1%), the average for EU countries being 11.04%.

However, the largest difference in gap VAT, in absolute terms, was reported as being registered for Italy, amounting to approximately 33.5 billion euros.

CASE (2019) estimates net final consumption by deducting effective VAT receipts from the gross final consumption, except for VAT receipts from investments made by exempt sectors that do not directly enter within the production of final goods.

Also, the estimation of the VAT collection deficit varies depending on how the GDP is estimated. If the underground economy is assumed to be included in GDP estimates, then estimating the fiscal gap to a lower value is appropriate. If, however, only a part of the underground economy is included in GDP, as it seems likely in most cases, then the results that indicate a larger gap give a better picture of the situation in the economy. The data on the national accounts transmitted by each EU Member State to Eurostat do not contain information on the part of the estimated underground economy of each country that is included in its GDP.

At EU level, a continuous process is underway and there are constant concerns about simplifying the VAT system, identifying the best measures to combat tax evasion and increasing the degree of compliance of economic operators, but for these efforts to materialize, it is necessary for the Member States to implement at national level also effective measures to limit the evasion phenomenon in the field of VAT and to improve the collection.
Descriptive Statistics on the Estimation of VAT Gap in Romania

Based on the data from the latest annual studies conducted by the EU regarding the "VAT GAP", for the financial year of 2017 (CASE 2019), Romania registered the largest national VAT gap, accounting for 36% of the unearned VAT revenues. It is also the country which, although it has taken measures to reduce the fiscal pressure, has not managed in the last 5 years to obtain the effects of these measures, in the light of the VAT collection deficit.

From the evolution of the VAT deficit registered by Romania during the analyzed period, it is revealed that with the increase in absolute terms of the total value of the VAT receivable, the increase of the difference between the collected VAT relative to the total VAT receivable is recorded, an evolution shown in the next graph.

By comparing the VAT gap registered in our country, as a percentage of the total VAT receivable, with the average value for the 28 EU Member States, it is found that the deficit registered in Romania is at least double above the average level, for the entire period analyzed, the highest value being recorded in 2009-2012.

This evolution suggests that further actions in the field of fiscal policies are needed in Romania, in order to combat the gap and improve the degree of collection of this type of indirect tax. In order to cope with a possible economic recession, the main economic "weapon" available is to stimulate the degree of tax collection, which is possible only in the case where the fiscal gap is reduced. The VAT deficit is also an instrument that indicates the scale of inequality between those who pay tax and those who have this obligation, but do not.

Romania, although it has implemented several measures to combat tax fraud in the field of VAT, including reverse taxation, cancellation of the registration code for VAT purposes which has as a consequence the refusal to deduct...
the tax both for the person whose code was canceled and at as a beneficiary, it still faces the highest level of VAT collection deficit recorded in comparison with the other Member States.

GENERAL CONCLUSIONS AND PERSPECTIVES OF THE RESEARCH

Quantification of the VAT Gap of compliance (due and unpaid) is an important aspect for the fiscal policy and strategy of any state, as these calculations also represent an indicator for measuring the size of tax evasion. Using data on the VAT gap from later years, could result in slightly different findings. In response to the economic crisis in 2008, the governments of EU Member States often increased the VAT rates. This increase together with other social and economic factor could result in changes in proportion of final consumption to GDP and other variables important for the VAT gap.

Romania stands out among the other EU Member States, due to the fact that, based on the calculations made by the EU, in the last 5 consecutive years, it was in the first place, registering the highest share of the VAT Gap in the total VAT revenues. These estimates indicate that our country is experiencing serious problems in the field of tax collection, that a reform of the tax system is needed to improve the collection of VAT and increase the taxpayers’ compliance.

As a positive aspect of this study - in recent years, there is an increase in the importance given to the analyzed concepts and their study, by the authorities, by intensifying the specific concerns in the matter, materialized in articles, studies, synthesis or even the adoption of common measures, especially for limiting intracommunity fraud.

As a limitation of the research carried out - within the analyzed period, the data in the national accounts are missing for some countries and there is a uncertainty that the information provided will not be comparable, including when using the same names, given the differences in approach, to define this concept - VAT gap.

REFERENCES

THE NOTION OF INSTITUTIONAL LOGICS IN CORPORATE GOVERNANCE

Katarina Dvorski

Abstract:
In this paper, I offer a critical summary of the body of literature important for understanding the institutional logics perspective in light of its contribution to corporate governance. I begin the paper by presenting the key tenets of institutional theory and move on to examining the phenomenon of institutional logics as an evolution of institutional theory. Relying on an extant literature review, I examine the concept of institutional logics from both a meta-theoretical and a methodological perspective. Additionally, I present a select review of empirical research addressing various issues recognized by institutional analysis scholars, most notably issues regarding institutional change and competing logics. Finally, I present an overview of suggestions for the improvement of the institutional logics approach and its application in corporate governance research. I argue that studying the key theoretical and methodological contributions of the institutional logics perspective helps in strengthening the theoretical reflexivity and the explanatory power of research, thus advancing our understanding of socially constructed organizations and institutions. By providing an overview of the key tenets of institutional theory and institutional logics, this paper can be viewed as a starting point for new and enthusiastic researchers interested in applying the institutional logics perspective in a variety of contexts.

Keywords: institutional logics, institutional theory, institutional change, competing logics, corporate governance

INSTITUTIONAL THEORY

One’s quest to understand institutional logics should start from the understanding of institutional theory and the concepts, constructs and terms under this wide theoretical umbrella (Berg Johansen & Boch Waldorff 2015; Thornton & Ocasio 2008).

Institutional theory has been a prominent conceptual and research framework, across the social sciences, since the middle of the 19th century (Scott 2014). However, for reasons not to be discussed in this paper (see Scott 2014), prolific institutional accounts of organization came to the fore in the 1970s (Scott 2014; Suddaby 2010). As Suddaby (2015) noted, institutional theory examines the social world and organizations by tackling the assumption of efficient production being a “necessary and proper organizational objective” (Suddaby 2015, p. 93). Moreover, social and political beliefs, norms, laws and regulations are recognized as independent variables that account for the institutional context points. People are seen as conforming, “legitimacy-seeking satisficers” (Eisenhardt 1988, p. 491). Moreover, legitimacy as the foundation of organizations and organizational practices is at the centre of the institutional problem domain.

The evolution and appeal of institutional theory can be tracked through three phases or waves (Berg Johansen & Boch Waldorff 2015; Suddaby 2013). Before outlining each of the waves, it is important to note that the boundaries between them are blurred and ambiguous. This adds to the conceptual cacophony and calls for attention in creating definitions and setting boundaries of one’s research.

The first wave of “old” institutionalism rests upon the Selznickian institutionalization process (see e.g., Selznick 1996). This value-oriented approach emphasized the difference between “organization” and “institution” (Berg Johansen & Boch Waldorff 2015; Hirsch & Lounsbury 1997). As Hirsch & Lounsbury (1997) noted, this phase reflected an action perspective and emphasized social construction, values, dynamics and change along with the struggles, and negotiations that underpin institutions (Lounsbury, 2008).

“New institutionalism” came to the fore in the 1970s conceptually building up from pivotal articles on the dominance of culture and legitimacy over the autonomy of organizations (Berg Johansen & Boch Waldorff 2015; Suddaby 2010). Zucker’s (1977) study examined how organizational actors use signals from their environments to give meaning to events, thus also describing institutionalizing authority in organizations. Meyer and Rowan (1977) addressed how organizations attribute rationality to activities. Finally, DiMaggio & Powell (1983, 1991) introduced the framework of organizational isomorphism. Isomorphism ideates the mechanisms or forces driving institutionalizations. One can differentiate between coercive isomorphism (power and legitimacy), mimetic isomorphism (mimesis as a response to uncertainty) and normative isomorphism (attraction and professionalization) (Beckert 2010; Frumkin & Galaskiewicz 2004). Over time, developments in new institutionalism moved away from ideational elements and meaning systems and focused more on structural implications of isomorphism (Suddaby 2010). In the third wave, bridges between “old” and “new” institutionalism started to develop and their common denominators were change and complexity. By taking on a rather highly agentic approach, researchers addressed topics such as institutional change (e.g., Greenwood et al. 2002), human agency (e.g., Battilana et al. 2009), institutional entrepreneurship (e.g., Greenwood & Suddaby 2006; Lawrence &...
Institutional theory is perceived as an “omnivorous theoretical object” explaining nothing (Berg Johansen & Boch Waldorff 2015). The concept of institutional organizations, and the society. The authors conceptualized institutions as the socially constructed, historical pattern of material practices, assumptions, values, and symbolic dimensions of institutions. Once created and shared through different interactions, means of reading and interpreting, condition a collective understanding of strategic interests and decisions in organizations. Hence, changes in

Socially constructed, institutional logics are rooted in values and shape (Thornton & Ocasio 2008).

Institutions need to be legitimized. Legitimacy occurs through creating expectations and identifiable sanctions. Legitimizations disables deviation from common practices and thus generates meaning for actors (Bathelt & Glückler 2014; Glückler & Lenz 2016, p. 260) note, any institutional approach has to be to be explicit and precise regarding its conceptualization of institution(s) to enable relevant theoretical, empirical and practical contributions.

Many researchers have employed institutions to describe the specific role of organizations that have a particular form and can be separated from their environments. Examples include, but are not limited to, trade associations, public bodies and political organizations.

Bathelt & Glückler (2014) note that organizations represent sets of actors and resources (collective actors) aimed at pursuing common goals and that institutions should be conceptualized as stabilisations or interdependencies of the interactions between actors. Hence, institutions should be seen in regard to particular economic and social processes and not in relation to measurable and specific outcomes.

In that sense, rules and other forms of codified prescriptions, as well as behavioural irregularities, are not institutions per se. Once created and shared through different interactions, means of reading and interpreting, institutions need to be legitimized. Legitimacy occurs through creating expectations and identifiable sanctions. Legitimizations disables deviation from common practices and thus generates meaning for actors (Bathelt & Glückler 2014; Glückler 2015). Put short, institutions are created through interactions and mutual expectations of actors concerning legitimate action.

The term “institutional logics” was pioneered by Alford and Friedland (1985, 1991) who investigated the interrelationships between individuals, organizations, and the society. The authors conceptualized institutions as supraorganizational patterns of activity that have both material (structures and practices) and symbolic (ideation and meaning) elements (Thornton et al. 2012).

Most accounts of institutional logics start with the definition given by Thornton and Ocasio (1999) who defined institutional logics “as the socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (Thornton & Ocasio 1999, p. 804). The appeal of the definition given by Thornton and Ocasio (1999) lies in bringing together the structural, normative, and symbolic dimensions of institutions as opposed to separating structural (coercive), symbolic (cognitive) and normative institutional carriers (Thornton & Ocasio 2008).

Socially constructed, institutional logics are rooted in values and shape the assumptions, rules, and beliefs, which determine the legitimacy and appropriateness of decision-making and actions on a field level (Dahmann & Grosvold 2017; Svenningsen-Berthéléem & et al. 2018). Institutional logics shape the cognition of actors and condition a collective understanding of strategic interests and decisions in organizations. Hence, changes in
institutional logics can influence which economic conditions are perceived as crucial or problematic and how that reflects in possible changes of the organizational strategy and structure (Thornton 2002; Thornton & Ocasio 2008). The five principles underlying the meta-theory of institutional logics are: (1) embedded agency; (2) society as an inter-institutional system; (3) material and cultural foundations of institutions; (4) multiple levels of institutions; and (5) historical contingencies (Thornton & Ocasio 2008). When discussing the building blocks of institutional theory and institutional logics, one has to pay special attention to the “paradox of embedded agency”. This paradox “corresponds to the agency vs. structure debate in the framework of institutional theory” (Battilana & D’Aunno 2009, p. 32). It reflects the question how can embedded agents be a factor in institutional change when their norms, beliefs, intentions, etc. are shaped by the social structures they aim to change (Battilana et al. 2009). Accounting for the paradox of embedded agency warns against simplistic introductions of agency into institutional theory. Furthermore, it implies that institutional theory and its developments can benefit from insights from other theories while remaining true to its fundamental questions and puzzles (Suddaby 2010).

Understanding society as an inter-institutional system allows individuals and organizations to understand their worlds in heterogeneous ways (Tan & Wang 2011). This allows the researcher to see any context as potentially shaped by the competing logics (Tan & Wang 2011; Thornton & Ocasio 2008).

Critics of the institutional logics scholarship argue that the field is overly concerned with examining institutions and institutional processes at the field-level as opposed to employing the institutional logics approach to explain and understand logics (Greenwood et al. 2014). Moreover, they note that the flexibility to focus on different levels (e.g., organizations, industries, geographic communities, etc.) would support the employment of various research and theory development mechanisms, thus making the theory more precise and general at the same time (Thornton & Ocasio 2008; Aldrich 2009).

After outlining institutional logics as an evolvement of institutional theory, the following paragraphs will provide an overview of select empirical research on institutional theory and institutional logics, with an emphasis on research in corporate governance.

**INSTITUTIONAL LOGICS: EXAMPLES OF EMPIRICAL RESEARCH**

The concept of institutional logics has gained considerable attention in the study of organizations from both a meta-theoretical and a methodological level (Mutch 2018).

An overview of the work on the institutional logics approach brings forth the phenomenon of institutional complexity (Greenwood et al. 2011) and multiplicity of institutional logics. Institutional complexity occurs when organizations face incompatible prescriptions from a number of institutional logics (Greenwood et al. 2011). Further, empirical studies on the nature of the relationship between multiple logics can be classified into two streams (Nicholls & Huybrechts 2016). The first stream focuses on a dialectical process in which a single logic dominates and sets “rules of the game” (Lounsbury 2007; Reay & Hinings 2005, 2009). The second stream examines managing logic dissonance and overthrowing the status quo.

In regard to managing the logic dissonance, a number of studies have sought to understand how actors manage the multiplicity of institutional logics (Reay & Hinings 2009). Conceptually, Goodrick & Ray (2011) propose moving away from emphasizing differences between logics in terms of locations, types of organizations and actors and promote the concept of constellations. The latter explains combinations of institutional logics as patterns that guide behavior at any point of time. Viewing logics as constellations supports more explicit higher-order theorization on the multiple societal/meta logics (Scott 2008; Thornton & Ocasio 2008) and their influence on actors and interactions.

An interesting approach towards the question of managing competing institutional demands and logics lies in the notion of hybrid organizations. Hybrid organizations are conceptualized as organizations that build upon elements from different institutional logics (Battilana & Dorado 2010; Pache & Santos 2013), thus representing ‘arenas of contradiction’ (Pache & Santos 2013, p. 972). Hybrid organizations challenge institutional theory by moving away from the notion of organizations as entities reproducing a single, dominant, institutional logic towards acknowledging complexities and frictions between logics (Besharov & Smith 2014; Skelcher & Smith Rathgeb 2015; Greenwood et al. 2011). However, these studies offer contrasting conclusions (Besharov & Smith, 2014).

In short, the current body of knowledge provides support for several fundamental topics that map out institutional logics in organization & management research. Inclusive categories are: (1) overarching institutional orders guided by institutional logics (e.g., Berg Johansen & Boch Waldorff 2015); (2) institutional change and agency (e.g., Haveman & Rao 1997, 2006; Greenwood et al. 2002; Greenwood & Suddaby 2006; Lounsbury 2007; Powell & Colyvas 2008; Goodrick & Reay 2011); and (3) types of relationships between logics (e.g., Bruton et al. 2015; Lounsbury 2007; Miller et al. 2017; Reay et al. 2015; Thornton & Ocasio 1999).

Finally, it is important to note that research on institutional logics has recently moved away from field-level analyses towards highlighting how organizational and managerial actions help balance frictions between institutional logics at the individual and firm level (Dahlmann & Grosvold 2017). Similarly, Zhao et al. (2017) note that contemporary institutional scholarship, with its shift from isomorphism towards institutional sources and
dynamics of heterogeneity, has implications for a number of firm-specific outcomes, including corporate governance.

Interestingly, rather little has been done in combining economic sociology with (comparative) corporate governance literature. There is a paucity of research that aims to understand the questions of why, when, and how firms develop, adopt, institutionalize and/or change governance practices (Aguilera et al. 2018). There is still a limited understanding of why corporate governance practices differ within a national environment (Garcia-Castro et al. 2013). Thus, Aguilera et al. (2018) advocate advancing multilevel theoretical frameworks that bring together micro and macro explanations of corporate governance practices. Put differently, there is a need to study not only the national institutional framework but also firm-level antecedents of corporate governance practices.

Research combining institutional theory and corporate governance can also be divided into two main research streams. The first stream addresses institutional contexts in terms of path-dependency legacies and national settings. Here, some of the articles are contextual in nature and put forward propositions and models that should be further examined. Another stream of research examines the enactment and existence of different institutional logics within firms and their impact on corporate governance practices.

The choice of the papers presented below serves as an initial step towards understanding the institutional logics approach in corporate governance and it is by no means exhaustive.

In regard to the first research stream, Aguilera and Jackson (2003) examined firm-level corporate governance in the light of institutional factors and social constructivism. The authors proposed a theoretical model accounting for variation in corporate governance practices. They also highlighted the processes of hybridization and institutional change. By taking on a top-down perspective, the authors explained how institutional factors shape interests of actors. More specifically, they looked at three major stakeholder groups (i.e., capital, labour, and management) and main institutional domains (e.g., ideology, property rights, inter-firm networks) and examined the impact of these domains on firm-level practices. Furthermore, they used configurations of domains and practices to account for cross-national diversity.

Aguilera (2005) further examined corporate governance mechanisms by shedding light on the role of boards of directors in regard to institutional contingencies and regulatory frameworks. She called for an in-depth analysis of the institutional context, especially multiple layers of regulation in which governance actors and firms are embedded.

Zattoni and Cuomo (2008) used institutional theory lens to analyze the adoption of corporate governance codes. Their findings show that the institutional specifics of the corporate governance system explain the main differences in the development and coverage of corporate governance codes.

More recently, Aguilera et al. (2018) combine the institutional logics perspective with both the governance and entrepreneurship literature to present a middle-range theory of how and why organizations operate in different national governance systems. The authors focused on the role of the institutional context in corporate governance deviance, thus opening a new avenue for comparative research.

As per the second research stream, Shipilov et al. (2010) utilized the institutional logics perspective to look at the diffusion and adoption of corporate governance practices in Canada. By developing a quantitative model of practice diffusion, they noted how mechanisms that drive the diffusion change over time. They also called for an analysis of the relationship of the board-reform logic and other existing logics, such as the logic of management-controlled boards.

Joseph et al. (2014) combined the institutional logics perspective with the structural elaboration theory to explain the evolution of corporate governance practices. By conducting an event history analysis of the Fortune 250 companies, the authors showed how governance structures may appear to align with the objectives of the dominant institutional logic, but in practice they conflict with those objectives.

Sobhan (2016) looked at the connection between conflicting institutional logics and corporate governance compliance in a developing country. By focusing on the macro-micro connection, the author showed how the implementation of a new regulative framework (Anglo-American corporate governance model), that conflicted with the dominant cultural-cognitive framework, shaped compliance practices.

Fan & Zietsma (2017) examined the concept of embedded agency. By conducting a longitudinal qualitative study of a water stewardship council, they developed a theory about how and why actors manage disparate logics across multiple fields and construct a new governance logic. Put differently, they acknowledged the bottom-up approach to institutional logics. Moreover, the authors emphasized the role of emotions in institutional logics. The latter is a topic that has been unrightfully neglected (see e.g., Friedland 2018; Friedland et al. 2014; Jarvis 2017).

In regard to logics construction, Teixeira et al. (2017) focused on the hybridization of logics and its and its impact on decision-making processes. More specifically, they did a qualitative analysis of the process related to the hybridization of cooperativism and corporate governance.

The paragraphs above shed light on the great diversity of research topics, thus providing support for the further development of the institutional logics perspective. With that in mind, it seems prudent to take a brief look at institutional logics as a method of analysis.
INSTITUTIONAL LOGICS AS A METHOD OF ANALYSIS

The meta-theoretical principles of institutional logics proposed by Thornton & Ocasio (2008) have been studied by utilizing various research methods. The purpose of the following paragraphs is to briefly present the most common methods used in research.

Thornton et al. (2012) note that the studies under the institutional logics approach build upon both qualitative and quantitative designs with a strong focus on data triangulation. More specifically, they state:

“Empirical research on institutional logics has employed a variety of methods, including surveys, archival documents, event history analysis and other statistical modelling techniques, interviews, ethnographic field notes, secondary data sets, and case studies” (Thornton et al., 2012, p. 184).

“Ideal types” are recognized as an analytical tool for examining the role of institutional logics (e.g., Thornton & Ocasio 2008; Goodrick & Reay 2011; Thornton et al. 2012; Reay et al. 2015). Skelcher & Smith (2015) note that empirically observed organizational forms typically manifest different combinations of ideal types, and thus compose hybrids. In other words, ideal types enable a systematic comparison of empirical variation (Goodrick & Reay 2011, p. 378).

The case study method is oftentimes chosen for its interpretive and exploratory nature with the aim of building theory from observed cases (Nicholls & Huybrechts 2006). For example, Vaskelainen and Münzel (2018) turned to a “phenomenon-driven single case study” based on qualitative data to utilize its explanatory power and to address context specificities as well as to support theory building.

Dahmann & Grossvold (2017) shed light on the potential of pattern inducing interpretivist analysis with repeated interviews being the dominant data source. Furthermore, the uses and implications of ethnographic methodologies in institutional research are well-documented and researchers argue in support of field study methodologies (Bjerregaard 201).

Finally, Joseph et al. (2014) give a good example of event history design and a quantitative approach to institutional theory.

To summarize, researchers are improving research designs that examine and measure phenomena, meaning and change under the institutional logics perspective. In that light, researchers have to be cautious about the proliferation of exclusively qualitative methods; they should aim to integrate interpretive and hypothesis testing approaches. (Thornton & Ocasio 2008). Along with the call for cross-level, multi-method studies, researchers should consider the call by Thornton et al (2012) who argued in support of experiments and simulations as available methods. Moreover, researchers should answer the call for the use of configurational research - the simultaneous conceptualization and analysis of the causal complexity underlying institutional logics and subjects such as corporate governance (Misangyi et al. 2017; Misangyi & Acharya 2014; Regin 2008).

CONCLUDING REMARKS

The purpose of this research paper has been to shed light on some important theoretical and empirical contributions that set the stage for understanding the institutional logics perspective under the “institutional theory” umbrella. The progress within the research agenda can be seen from tackling the cacophony of institutional theory through theoretical elaborations and clarifications, greater scope of idea application, development of sound empirical indicators, and utilizing new and improved methodological tools (Scott 2008).

In assessing the explanatory potential of the institutional logics perspective, researchers have to pay due attention to the differences in understanding institutional logics. Theorizing institutional logics still leaves great room for interpretation; a majority of research has not yet utilized this opportunity.

To summarize, institutional research should not solely focus on the outcomes of institutional processes, but should aim for an in-depth comprehension the sources of heterogeneity and dynamics of those processes, without shrinking complex causal threads to a number of relatively discrete and measurable variables (Suddaby 2014).

REFERENCES


CURRENT STATE ANALYSIS OF SMART CITIES IN THE REPUBLIC OF CROATIA

Ivana Fojs

Abstract:
The percentage of people living in cities increases every year and to prevent overpopulation smart cities are a priority for national governments. The aim of this review paper is to present the current state of smart cities infrastructure in the Republic of Croatia, i.e. the overall level of maturity in the application of components of smart city models. The basis for this work are previous research regarding the identification of successful implementation of smart solutions in big Croatian cities and publicly available smart cities development strategies. For the development of a smart city, the starting point is certainly the strategy adopted by the city council, often in collaboration with external consultants. The question is how many big cities in Croatia have a smart city strategy for the future and how many cities are really implementing the goals set by the strategy. This paper on smart cities in Croatia was conducted with data collection technique, i.e. web harvesting technique, by which, all cities that have a publicly available smart city strategy, independent of the city development strategy in the future have been identified and consolidated. The contribution of this paper is evident from the author's model that differentiates cities by division into creative, digital, eco-cities and smart cities. Apart from the above, the paper consolidates the latest available data related to the current state of smart cities in Croatia, because it is inevitable that data on smart cities are up-to-date. According to these data, the overall maturity of smart cities in Croatia was estimated.

Keywords: smart cities, smart city maturity model, creative city, digital city, eco-city

INTRODUCTION

The smart city concept combines information and communication technology (ICT), digital transformation, economic growth, connectivity, natural resources and sustainability, cost-effective practices as well as a high quality of life and life satisfaction in a single city. Terms such as intelligent cities, digital cities, or even creative cities are often used interchangeably as synonyms for smart cities. According to Caragliu, Del Bo and Nijkamp (2009), the majority of previous definitions focus on the use of information and communication technologies (ICTs) as the main feature of smart cities. However, these authors claim that ICTs can lead to economic growth solely in collaboration with human capital, which is why they stress the importance of social capital and participation of citizens in urban governance. Already in 2008, Hollands recognized the imperative of residents living in harmony with modern ICTs, which involves higher risks when redefining a new concept of an existing city. This is related to the effects of virtual economy, which has defined determinants of not only future enterprises, but also future development strategies on local, national and regional levels (Kolaković, 2010). Moreover, Hollands emphasized the problem of under-representation of young creative people whose ideas could improve the city, but just cannot stand out due the city’s established ways and rigidity. A solution to these problems are smart cities which could bridge the gap between creative entrepreneurs (“smart entrepreneurship”), local governments and citizens.

Digital City

Digital cities involve a wide range of networks and softwares which facilitate citizens’ daily life and activities, for example in healthcare, education, commerce, transport and in their leisure time as well. Komninos (2006) distinguishes four structural levels of the digital city architecture: the information storehouse or database including all digital content; the applications which provide online services; the user interface, i.e. web pages; and, lastly, the administration, i.e. managing the database and connecting it with the applications and user interface.

Intelligent City

An intelligent city defined by Komninos is a system combining knowledge-based activities, institutions for problem solving, and digital infrastructure – in other words, it is an innovative and digital community. Such a system consists of a level of production and services, a level focused on innovation, research, development and knowledge, and a third level involving digitalization, the use of ICTs and other modern technologies improving the quality of life.
Creative City

In 1988, Yencken claimed that cities should promote not only economic and political development, but also creative development, so that the citizens would be satisfied with life in their city. The extent to which creativity and culture are important for economic development is best seen in the 2019 report by Joint Research Centre. In this report, the data in the C3 Index (Cultural and Creative Cities Index) suggest that one percent higher C3 Index corresponds to nearly one percent point higher annual GDP per capita (Joint Research Centre, 2019).

Dimensions of Smart Cities

Since a unique definition of the smart city does not exist, there are various models allowing to measure the maturity of a smart city. A study carried out by Giffinger et al. in 2007 is one of the earliest studies dealing with the topic of smart cities, and it was this study that identified a model of the characteristics of a smart city. A smart city is manifested in six dimensions: smart economy, smart people, smart governance, smart mobility, smart environment and smart living. In order to measure the maturity of a smart city, each of the six dimensions is defined through 33 factors in total, which are in turn defined through 74 indicators. In their study, Giffinger et al. compared the indicators of 70 medium-sized cities of Europe. The study found that Scandinavian and Benelux cities ranked the highest. The top-ranking smart cities were Luxembourg (Luxembourg), Aarhus (Denmark), Turku (Finland), Aalborg (Denmark), Odense (Denmark), Tampere (Finland). Taking into account all six dimensions, these cities could rightly be called smart cities and serve as a model to other cities. According to some recent data, the situation has not changed since. The greatest number of smart cities is still in those regions. For example, Zagreb occupies 35th place, where it is best positioned in the dimension of smart citizens. An overview of the dimensions together with their respective indicators is given in the table below.

| Table 1. Dimensions of smart cities; author's work according to Giffinger |
|---------------------------------|------------------|------------------|
| **SMART ECONOMY**               | **SMART PEOPLE** | **SMART GOVERNANCE** |
| 1 Innovative spirit             | Level of qualification | Participation in decision-making |
| 2 Entrepreneurship              | Affinity to life long learning | Public and social services |
| 3 Economic image & trademarks   | Social and ethnic plurality | Transparent governance |
| 4 Productivity                  | Flexibility       |                  |
| 5 Flexibility of labour market  | Creativity        |                  |
| 6 International embeddedness    | Cosmopolitanism/Open mindedness |                  |
| 7 Participation in public life  |                  |                  |
| **SMART MOBILITY**              | **SMART ENVIRONMENT** | **SMART LIVING** |
| 1 Local accessibility           | Attractivity of natural conditions | Cultural facilities |
| 2 (Inter-)national accessibility| Pollution         | Health conditions |
| 3 Availability of ICT-infrastructure | Environmental protection | Individual safety |
| 4 Sustainable, innovative and safe transport systems | Sustainable resource management | Housing quality |
| 5 Education facilities          |                  |                  |
| 6 Touristic attractivity        |                  |                  |
| 7 Social cohesion               |                  |                  |

RESEARCH METHODOLOGY

To estimate the overall maturity level of smart cities in Croatia, this paper reviewed the available literature on smart cities in Croatia, with emphasis on official smart city development strategies and scientific papers, which include a case study or a survey regarding Croatian cities. This paper was conducted with data collection technique and relevant literature review analysis.
Previous Smart City Research Worldwide; Croatia in Relation to Other Countries

According to Smart Cities World, an online platform reporting on trends and providing examples of best practices regarding the implementation of smart solutions, the world’s leading smart cities include Adelaide, Amsterdam, Atlanta, Barcelona, Bristol, Copenhagen, Dortmund, Seoul, Singapore, Tampere, Toronto and others. The platform, however, does not name any Croatian city. A study conducted by the IMD World Competitiveness Center’s Smart City Observatory and the Singapore University of Technology and Design (SUTD) ranks 102 countries of the world. This study as well does not include any Croatian city. The European cities near Croatia which are roughly comparable to Zagreb in terms of population, that are ranked on this list include Vienna (17th place overall), Prague (19th), Bratislava (84th), Bucharest (85th), Budapest (83rd), Milano (22nd), and Sofia (89th) (IMD, 2019). According to the Sustainable Cities Index 2018, which ranks cities on the basis of people, planet and profit pillars, not one Croatian city is found among the top 100 leading countries worldwide. However, the list includes cities in neighboring and nearby countries – for example, Vienna in 5th place, Prague in 23rd place, and Budapest in 57th place, which was not even in the top 100 in 2015 (Arcadis, 2018). In the UN’s report, Croatia is among the 10 countries with the lowest degree of urbanization in Europe, but it should be noted that Croatia endured a population decline between 1990 and 2018 both in rural and urban regions (UN). Furthermore, in the Global Innovation Index (2019) Croatia occupied 10th out of 129 places, while being 51st in the creative output dimension.

Literature Review – Research on Smart Cities in Croatia

Relevant bibliographies of scientific and professional papers (WoS, Scopus, CROSBI, Hrčak) were searched by keywords related to smart cities and the following results were obtained (April 2020). As mentioned in the introduction, the term “smart city” is often treated as a synonym for “creative city”, “digital city” and “intelligent city”. Therefore, all of the terms were included in the search.

Table 2. Number of results by keywords; author's work

<table>
<thead>
<tr>
<th>DATABASE</th>
<th>Keywords</th>
<th>Number of results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web of Science</td>
<td>Smart city; smart cities</td>
<td>15.050</td>
</tr>
<tr>
<td></td>
<td>Creative city</td>
<td>4.273</td>
</tr>
<tr>
<td></td>
<td>Intelligent city</td>
<td>3.867</td>
</tr>
<tr>
<td></td>
<td>Digital city</td>
<td>6.688</td>
</tr>
<tr>
<td></td>
<td>Smart cities; Strategy</td>
<td>1.697</td>
</tr>
<tr>
<td></td>
<td>Smart cities; Case study</td>
<td>1.727</td>
</tr>
<tr>
<td>Scopus</td>
<td>Smart city; smart cities</td>
<td>27.592</td>
</tr>
<tr>
<td></td>
<td>Creative city</td>
<td>6.877</td>
</tr>
<tr>
<td></td>
<td>Intelligent city</td>
<td>10.797</td>
</tr>
<tr>
<td></td>
<td>Digital city</td>
<td>13.583</td>
</tr>
<tr>
<td></td>
<td>Smart cities; Strategy</td>
<td>7.153</td>
</tr>
<tr>
<td></td>
<td>Smart cities; Case study</td>
<td>8.171</td>
</tr>
</tbody>
</table>

Since, for example, the keyword “smart city” generates 15,050 results in the Web of Science database, and 27,592 in the Scopus database (April 2020), all of the terms were searched in combination with the word “Croatia”. The results of the search are presented in the graph below. However, a slight inconvenience of this type of search is that it lists papers published by Croatian authors from various universities who only discuss the terms for the smart city concept, but who have not actually conducted research on the development of smart cities in Croatia.

Graph 1. Number of results with specified keywords; author's work

In the next step of the search, keywords “case study”, “strategy”, “Danube region”, “Mediterranean”, and “Southeast Europe” were entered together with the initial words so that the results would include concrete examples of smart cities in Croatia or neighboring countries. The articles retrieved by searching for “Smart cities”, “Case study”, “Mediterranean”, “Danube” or “Southeast Europe” in the majority of cases only provided an overview of previous research on Spanish and Italian cities, while neither of them dealt with Croatian cities. The following results were obtained by this search:
Table 3. Number of results from Croatian databases; author’s work

<table>
<thead>
<tr>
<th>DATABASE</th>
<th>Keywords</th>
<th>Number of results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROSBI</td>
<td>Smart city; smart cities; Croatia; Smart cities; Case study; Europe</td>
<td>159 13 3 2 0</td>
</tr>
<tr>
<td>Hrčak</td>
<td>Pametni grad (smart city in croatian); Pametni gradovi</td>
<td>56 45 3 4 2 1</td>
</tr>
</tbody>
</table>

After reading the titles and abstracts of the articles retrieved by searching for the keywords, 34 papers were recognized as relevant, and thus they were analyzed for the purposes of this study. An overview of the authors, the year of publishing and the focus of the articles is given in the table below. The plus sign (+) marks the topics which are covered in the articles. Therefore, if the article describes dimensions of smart cities and their indicators, the plus sign is placed in the box under this category. The other categories include: strategies (examples and guidelines for the development of smart city strategies), citizens (citizens’ awareness and knowledge of smart city concepts), technologies (descriptions of technologies used in the implementation of smart solutions), and finally, mobility/transport (improvements of transport infrastructures in cities). The last category includes the papers which provide analyses relevant for Croatia on the basis of a real example, experiment, survey or some other research method. The examples of cities which are in the focus of these studies are given in the last column. Some papers cover several categories.

Table 4. Categorization of research papers; author’s work

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Dimensions and indicators</th>
<th>Strategies</th>
<th>Citizens</th>
<th>Technologies</th>
<th>Mobility/transport</th>
<th>Case study; city example; survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ćukušić et al, 2019</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Split</td>
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<tr>
<td>2 Milenković et al, 2017</td>
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<tr>
<td>3 Abramović, 2013</td>
<td></td>
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<td></td>
<td></td>
<td>Varaždin</td>
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<tr>
<td>4 Šurdonja et al, 2019</td>
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<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
<td>Rijeka, Zagreb</td>
</tr>
<tr>
<td>5 Sočivica, Šmit 2019</td>
<td></td>
<td>+</td>
<td></td>
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<tr>
<td>6 Brčić et al, 2018</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
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<tr>
<td>7 Giuffrè, 2018</td>
<td></td>
<td>+</td>
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<tr>
<td>8 Pavlić et al, 2019</td>
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<td>+</td>
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<tr>
<td>9 Petrović Krajnik</td>
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<tr>
<td>10 Koštić et al, 2019</td>
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<td>+</td>
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<tr>
<td>11 Zdjelar et al, 2016</td>
<td>+</td>
<td>+</td>
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<tr>
<td>12 Rašić et al, 2018</td>
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</tbody>
</table>
With the help of the web harvesting technique, five more papers were identified and their categorization is given in the table below:

Table 5. Categorization of research papers outside selected database; author's work

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Dimensions and indicators</th>
<th>Strategies</th>
<th>Citizens</th>
<th>Technologies</th>
<th>Mobility/transport</th>
<th>Case study, city example, survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zdjelar, Kelemen, 2019</td>
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<tr>
<td>Zekić-Sušac et al, 2020</td>
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<td>Bašić, 2019</td>
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<td>Grgot, 2019</td>
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<td>Hodžić, 2019</td>
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<td>Šostar et al, 2019</td>
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<tr>
<td>Tomićić-Pupek et al, 2019</td>
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<tr>
<td>Kelemen et al, 2017</td>
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<td></td>
<td>Koprivnica</td>
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<tr>
<td>Weber, Podnar Žarko 2019</td>
<td>+</td>
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<td>Split</td>
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<tr>
<td>Grubeša et al, 2018</td>
<td></td>
<td>+</td>
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<td></td>
<td>Zagreb</td>
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<tr>
<td>Perić, 2016</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>Rijeka</td>
</tr>
<tr>
<td>Brčić et al, 2017</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pražen et al, 2020</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>Šibenik</td>
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<tr>
<td>Suhanek et al, 2019</td>
<td></td>
<td>+</td>
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<tr>
<td>Perko et al, 2017</td>
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<tr>
<td>Šimunović et al, 2017</td>
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<td>Zagreb</td>
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<tr>
<td>Musa et al, 2017</td>
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<tr>
<td>Schatten et al, 2019</td>
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<tr>
<td>Russo et al, 2019</td>
<td>+</td>
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</tr>
<tr>
<td>Jelinčić, Žuvela, 2013</td>
<td>+</td>
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<td></td>
<td></td>
<td>Zagreb</td>
</tr>
<tr>
<td>Paliaga, Oliva, 2018</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>Istra</td>
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<tr>
<td>Stanković et al, 2017</td>
<td>+</td>
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<td>Zagreb</td>
</tr>
</tbody>
</table>
RESULTS

On the basis of 39 papers (34+5), a literature review on smart cities in Croatia delivers the following results: nearly all examined papers (87%) involve some kind of research (survey, case study). Among all the authors, 38% describe smart city dimensions, 14 papers are focused on smart city development strategies, 36% of papers describe technologies, while 8 papers deal with smart mobility. Only 10 papers focus on the Croatian citizens’ perception of smart cities. The lack of research on this topic provides ideas for future research.

Smart City Strategies

The web harvesting technique was used to find which Croatian cities have implemented smart city strategies and the following cities were identified: Zagreb, Karlovac, Dubrovnik, Jastrebarsko, Krk, Rijeka, Ludbreg, Dugo Šelo, Velika Gorica, Kastav, Bjelovar, Supetar and Umag, which is only 11 percent of the total of Croatian cities.

Croatian Cities Demarcation Model

Considering characteristics of creative, digital, ecological, and smart cities, a division model of Croatian cities has been created. The model represents a consolidated overview of the Croatian cities which have been observed. It is based on the information conducted with data collection technique.

Digital cities - according to Apsolon’s study, Croatian digital cities include: Rijeka (the city with the best score in all indicators), Zagreb, Pula, Karlovac, Zadar, Velika Gorica, Samobor, Sisak, Koprivnica, Varaždin, and Dubrovnik.

Smart cities - Pazin, Dubrovnik, Varaždin, Pula, Rijeka, Zadar, Čakovec, Split, Koprivnica, Samobor, and Karlovac. If the data for the city of Zagreb are included in the ranking, Pazin still holds the lead, and it is followed by Zagreb, Dubrovnik, Samobor, Pula, Zadar, Čakovec, Split, Šibenik, Rijeka, and Varaždin (Alibegović et al.).

Creative cities - the Creative Cities of Croatia currently has 29 members: Donja Stubica, Drniš, Jastrebarsko, Kaštel, Kastav, Koprivnica, Ludbreg, Oroslavje, Osijek, Ozalj, Pletenica, Pregrada, Rijeka, Samobor, Slatina, Šibenik, Varaždin, Vodice, Vrgorac, Zabok, Zadar, Zagreb, Zlatar, Čabar, Dubrovnik, Đakovo, Lepoglava, and Sveta Nedjelja. The cities of Rijeka and Zagreb are also identified as creative cities by Krstinić Nižić et al. In the 2019 report by Cultural and Creative Cities Monitor (JRC), a sample of 190 European cities was put under scrutiny in three dimensions reflecting a city’s creativity: “Cultural Vibrancy”, “Creative Economy” and “Enabling Environment”. The following Croatian cities were part of the analysis: Rijeka, Dubrovnik, Pula, Split, Osijek, and Zagreb.

Eco-cities - the cities of Prelog and Krk separately collect more than 60% of municipal waste (Jutarnji.hr), while Dubrovnik, Umag, Opatija and Jastrebarsko are not far behind. Eco-taxis are available in the following cities: Čakovec, Varaždin, Pula, Opatija, Rijeka, Velika Gorica, Zaprešić, Vodice, Sinj, Zagreb, Dubrovnik and Split. In 2019, the city of Koprivnica won the title ECO City. In 2006, Novigrad won IDA’s first prize for the European continent for the implementation of energy efficient public lighting (Novigrad.hr). The city of Zlatar prides itself on its Eco school and the street lighting refurbishment project (Zlatar.hr). On the basis of consolidated data, Croatian cities were classified as creative, digital, ecological, and smart cities, which allowed a demarcation model of Croatian cities to be created. According to the model, the best-performing cities are the cities of Rijeka, Koprivnica, Dubrovnik, and Samobor because these cities have positive examples in all categories, as the literature review has shown. The cities of Varaždin, Zadar and Zagreb can be considered digital, creative and smart cities, but they are not eco-cities. Cities Jastrebarsko, Zlatar, Pula and Karlovac have good scores in two categories. The other cities subject to the study are part of only one category.
Image 1. Division of cities into smart, creative, digital and ecological cities, author’s work

**Smart Cities Maturity Model**

For the purposes of this paper, a theoretical assessment of maturity level of Croatian cities was carried out on the basis of previous research. Different authors propose different city maturity models which mostly differ in the names of particular stages, but are the same in essence. The maturity model proposed by Urban Tide (2014):

1. Ad-Hoc – activities focused on digital and data service improvement, data collection, building case studies
2. Opportunistic – collaboration, data sharing, outcome driven joint decisions
3. Purposeful and Repeatable – system integration, systemwide technology investment, joint investments, shared accountability
4. Operationalised – improved prediction, real-time responses, better outcomes
5. Optimised – sustainable and open systems, continuous adaption and improvements, innovations for city competitiveness, “system of systems”

IDC’s maturity model (2017) is equal to the one proposed by Urban Tide. Authors Korachi and Bounabat propose a smart city maturity model of their own, consisting of the initial, developing, defined, managed, and integrated level.

After reviewing relevant literature, reading the papers and their findings, examining available Croatian smart city strategies and smart city maturity models, as well as analyzing the existing examples of Croatian smart cities, the theoretical conclusion is that Croatia is in the stage two of smart city maturity. Research on the global level does not include even one Croatian city, which suggests that none of the cities have a sufficiently developed smart infrastructure. The research this paper relies on shows that the majority of Croatian cities implement (or soon plans to implement) smart solutions, yet there are only a few cities which have developed smart city strategies. Citizens are familiar with the smart city concept, but they are not completely sure what it entails or whether there are smart solutions in their cities. Some technologies for the implementation of smart solutions are available in Croatia, therefore, it is likely that Croatian cities will be in the stage three in a few years. Future research should adapt maturity indicators to Croatian cities, each of which should be placed in an adequate category, i.e. level, after which it is possible to give concrete advice for improvement, and not only a theoretical review.

**CONCLUSION**

Urbanization and virtual economy are some of the reasons why there is a need for smart solutions and smart cities. It is necessary to establish a connected, smart community which would stimulate the entrepreneurial climate and “smart entrepreneurship” with ecologically responsible solutions aimed at improving the quality of life. Consequently, the implementation of smart city solutions is growing in importance. However, the research conducted with the help of the web harvesting technique has shown that only a minority of Croatian cities intend to implement a smart city strategy. Among the existing examples of implemented smart city solutions in Croatian cities, the following cites lead the way: Rijeka, Dubrovnik, Zagreb, Pazin, Samobor, Pula, Split, Šibenik, Jastrebarsko, Koprivnica, and Varaždin. Furthermore, if the cities are classified as smart, creative, digital or...
ecological cities according to their characteristics, then the top-ranking cities include Rijeka, Koprivnica, Dubrovnik, and Samobor. This division gives the local governments an insight into problematic areas in their cities. The maturity model shows that Croatian cities are at level two of maturity, with some cities being more engaged than others in the implementation of smart solutions. This research, limited to selected cities, lacks breadth. In order to achieve an all-inclusive smart-city model in Croatia, advice for future research is to adjust the indicators of smart city dimensions to Croatian cities and encompass all cities, i.e. the citizens of all 128 cities.

REFERENCES

8. Brčić, D., Slavulj, M., Sojat, D., Jurak, J. (2018). The role of Smart Mobility in Smart Cities// Road and Rail Infrastructure V / Lakušić, Stjepan (ur.). Zagreb: Department of Transportation, Faculty of Civil Engineering, University of Zagreb, str. 1601-1606
11. Ćukušić, M., Jadrčić, M., Mijač, T. (2019). Identifying challenges and priorities for developing smart city initiatives and applications // Croatian Operational Research Review, 10 1; 117-129
60. The Sustainable Cities Index, (2018) ARCADIS. Available at: https://www.arcadis.com/media/1/D/5/%7BD15A57E2-A348-4B6E-B17D-6D94F47D7567%7DSustainable_Cities_Index_2018_Arcadis.pdf [Accessed 10 Apr. 2020].
66. Zdjelar, R., Kelemen, R. (2018). The smart cities are implemented – Are citizens also "smart"? // Smart Cities and Regional Development (SCRD) Journal, 3 1; 46-72
THE IMPACT OF AUTHENTIC LEADERSHIP ON EMPLOYEE PSYCHOLOGICAL CAPITAL IN THE HOSPITALITY INDUSTRY
Sanda Grudić Kvasić 1, Gordana Nikolić 2 and Vedran Milojić 3

Abstract:
Psychological capital is a focal component of authentic leadership theory. The importance and growing popularity of psychological capital stem from its positive effect on desirable employee work-related attitudes and behaviors, which is particularly pronounced in the service industries. However, empirical research on the relationship between authentic leadership and psychological capital in the hospitality industry is scarce. In order to fulfil this gap in the literature, the present study investigates the influence of authentic leadership on hotel employees’ psychological capital, additionally examining the moderating role of organizational structure. The findings confirmed that managers who demonstrate authentic leadership behaviors are able to positively impact hotel employees’ psychological capacities of hope, optimism, resilience and self-efficacy. However, there was no empirical evidence to support the hypothesized moderation effect of organic organizational structures in the said relationship.

Keywords: authentic leadership, psychological capital, hospitality industry, positive organizational behavior

INTRODUCTION

Authentic leadership (AL) is now a well-known and established form of positive, transparent and ethical organizational leadership that can meet today’s economic and wider societal challenges. In the theory-building process, scholars drew from positive psychology (Seligman & Csikszentmihalyi, 2000) and positive organizational behavior (POB) movement (Luthans, Avolio, Avey & Norman, 2007) in order to describe the mechanisms by which authentic leaders exert their influence on followers’ attitudes and behaviors. As a prominent construct in POB, psychological capital (PsyCap) - comprised of hope, optimism, resilience and self-efficacy, was found to be an important antecedent as well as a consequence of authentic leadership. Namely, the leader’s psychological resources were set to encourage the development of authentic leadership which, through influential processes of personal identification and positive modeling, results in a higher level of psychological capital and authenticity of followers (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May & Walumbwa, 2005; Ilies, Morgeson & Nahrgang, 2005; Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008). The relevance of PsyCap is reflected in a plethora of empirical studies proving its positive impact on desirable employee work-related attitudes and behaviors, such as job satisfaction, organizational citizenship behavior and job performance (Cerović & Grudić Kvasić, 2016). It is important to note that this effect is particularly pronounced in the service industries (Avey, 2011) that are based on social interactions in which the expression of employees’ positive cognitive and affective states is expected (Pugh, 2001). In hospitality organizations, as is any labor-intensive industry, the achievement of business objectives and competitiveness is largely dependent on employees’ performance (Ottenbacher, 2007). This stems from the fundamental characteristic of services, that is the impossibility of separating the service from the service provider (Wirtz, Heracleous & Pangarkar, 2008). According to the Service-Profit-Chain theoretical framework (Heskett, Sasser & Schlesinger, 1997), service employees, and especially frontline employees, drive customer satisfaction and loyalty and, consequently, organizations’ growth and profitability. As a result, a growing number of scholars point out that employees should be at the center of hospitality management research (Hofmann & Stokburger-Sauer, 2017; Lu & Gursoy, 2016; Slätten, Svensson & Sverri, 2011). So far, the relationship between authentic leadership and psychological capital has been empirically tested in numerous settings: finances (Walumbwa, Luthans, Avey & Oke, 2011), nursing (Laschinger & Fida, 2014), commerce (Rego, Sousa, Marques & Cunha, 2012), logistics (Wang, Sui, Luthans, Wang & Wu, 2014), education (Adil & Kamal, 2016), maritime and airline industry (Avey, 2014; Hystad, Bartone & Eid, 2014; Olaniyi & Hystad, 2016). Yet, similar work in the hospitality industry is scarce (Schuckert, Kim, Paek & Lee, 2018). Also, even though the initial AL model posits that authentic leadership develops under “a highly developed organizational context” (Luthans & Avolio, 2003: 243), this is the subject of only a few empirical studies. Building upon earlier research, this study examines the influence of authentic leaders on employees’ psychological capital in the hospitality domain. The authors suggest that such an impact is more significant in organizations with flexible organizational structures. In testing the proposed hypotheses, the authors employ a quantitative positivistic research design. The level of analysis is the individual employee.
LITERATURE REVIEW

Psychological Capital
The inception of positive organizational behavior indicated a paradigm shift in terms of moving away from the study of “negativity”, i.e., organizational irregularities and deficiencies, and instead, focusing on positive individual outcomes that contribute to the achievement of organizational goals in a globalized and uncertain business environment. While it recognized the value of positive constructs traditionally researched in the field of organizational behavior, the school of positive organizational behavior introduced a new concept called “psychological capital”.

As a core construct of POB, psychological capital meets the following inclusion criteria (Luthans et al., 2007: 8; Luthans, 2010: 199): (1) Based on theory and research: as opposed to popular self-help literature on positivity, psychological capital is founded in renewed theoretical frameworks such as social cognitive theory; (2) Valid measurement: most widely used measures of PsyCap are the 24-item Psychological Capital Questionnaire (Luthans et al., 2007), the 12-item PCQ (Avey, Avolio & Luthans, 2010; Luthans, Avey, Smith & Li, 2008), and the implicit measure I-PCQ (Harms & Luthans, 2012); (3) State-like: PsyCap is readily open and malleable to development and change as opposed to fixed traits.; (4) Impactful on work-related performance: conceptual and empirical research supports the fact that psychological capital is positively and significantly related to employee performance in the workplace.

Luthans et al. (2007: 3) describe psychological capital as an "individual’s positive psychological state of development and is characterized by a) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; b) making a positive attribution (optimism) about succeeding now and in the future; c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success”.

Authentic Leadership
Several years after the concept of PsyCap had been introduced in the literature, a question of whether leaders impact their followers’ psychological capital was raised. Answering this scholarly call, a positive relationship between the leader’s and employees’ psychological capital has been established in the work of authors mainly interested in the theory of authentic leadership.

Authentic leadership is a contemporary leadership theory which emerged in response to corporate ethical scandal and societal upheavals at the turn of the century. Conceptualized as a “root construct” underlying all positive forms of leadership (Gardner et al., 2005), AL was set to restore trust among followers and to promote their well-being and development. Authentic leaders are perceived by others as being aware of their own and others’ values, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, resilient, and of high moral character (Avolio, Gardner, Walumbwa, Luthans & May, 2004). In addition to the individual authenticity of the leader, authentic leadership also encompasses the authenticity of the relationship between leaders and followers which is characterized by transparency, openness and trust, as well as the promotion of personal and professional development of followers (Gardner et al., 2005).

AL was first defined as “a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development” (Luthans & Avolio, 2003). The authentic leader is confident, hopeful, optimistic, resilient, transparent, moral/ethical future-oriented, and gives priority to developing associates into leaders themselves. Psychological capital is thus posited as both an input and an outcome of authentic leadership development. Namely, authentic leaders draw from their own positive psychological states that accompany optimal self-esteem and psychological well-being, such as confidence, optimism, hope and resilience, to model and promote the development of these states in others (followers).

The presumed influence of authentic leadership on employee psychological capital is supported by several theoretical considerations, with an emphasis on the process of personal identification and leading by example. Avolio et al. (2004) suggest that the personal identification of the follower with the leader is encouraged through leading by example and by expressing high moral standards, honesty and integrity of the leader in mutual interactions. Their study further explains how authentic leaders have the ability to maintain hope and trust and thus foster hope in followers by not only strengthening their willpower, but also providing them with guidelines for action. This also increases their sense of self-efficacy. Furthermore, authentic leaders take a positive stance in interpreting information, events, and interactions with followers, and thus increase their optimism.

Finally, and in line with integrative approach to leadership, many scholars raised the issue of contextual factors that need to be addressed in the authentic leadership research. As Gardner (1993: 1) asserted, leaders “are an integral part of the system, subject to the forces that affect the system… In the process, leaders shape and are
shaped”. Avolio et al. (2004) emphasized the role of organizational power, organizational structure and culture as contextual factors that may influence the authentic leadership process, while Jensen & Luthans (2006) associated the effectiveness of authentic leadership with an organic organizational structure. Investigating the relationship between authentic leadership and followers’ psychological capital, Woolley, Caza & Levy (2011) identified a positive organizational climate as the mediation variable. Similar research has not been conducted in the hospitality industry.

Based on the discussion presented so far, the authors propose the following hypotheses:

**H1:** Authentic leadership is positively related to employees’ psychological capital.

**H2:** Organic organizational structure moderates the relationship between authentic leadership and employees’ psychological capital.

**METHODOLOGY**

**Sample and Procedure**

Data analysis was performed on a sample of 226 hotel employees from 24 two-, three-, four- and five-star hotels located in three different destinations in Croatia. The respondents were predominately female (59.30 percent) and with secondary education (58.40 percent). The mean age was 36.5 years (SD = 8.5). On average, employees had 8.9 years of organizational tenure (SD = 3.7).

Hotel employees were asked to rate their leader’s AL behaviors and hotel’s organizational structure, while PsyCap was measured through employees’ self-report.

**Measures**

The Authentic Leadership Inventory - ALI (Neider & Schriesheim, 2011) was used to measure hotel employees’ perception of their manager’s authentic leadership behavior. It consists of 16 items (four items four each AL dimensions: self-awareness, relational transparency, internalized moral perspective and balanced processing). Sample items for each dimension are the following: (1) Self-awareness: “My leader shows that he/she understands his/her strengths and weaknesses”; (2) Relational transparency: ”My leader clearly states what he/she means”; (3) Internalized moral perspective: “My leader resists pressures on him/her to do things contrary to his/her beliefs”; (4) Balanced processing: “My leader carefully listens to alternative perspectives before reaching a conclusion”.

The 24-item Psychological Capital Questionnaire – PCQ (Luthans et al., 2007) was used to assess employees' psychological capital. The scale utilizes six items for each dimension of psychological capital (self-efficacy, hope, optimism, resilience). Sample items are the following: (1) Self-efficacy: “I feel comfortable in representing my work area in meetings with management”; (2) Hope: “I can think of many ways to reach my current goals”; (3) Optimism: ”I'm optimistic about what will happen to me in the future as it pertains to work”; (4) Resilience: “I can get through difficult times at work because I've experienced difficulty before”. In order to maintain a consistent positive direction of responses, three items (13, 20 and 23) were reversed coded prior to analysis, which is in line with procedures in similar research (Avey et al., 2010). Generally speaking, negatively worded items have proven to be problematic in previous research on positive constructs (Merritt, 2012). A sample item of a negatively worded item (13) is: “When I have a setback at work, I have a hard time recovering from it, moving on”.

The organizational structure is commonly operationalized using its different key variables: complexity (vertical and horizontal differentiation), formalization, and centralization (Baligh, 2006: 4). Given the nature of the present research where the organizational structure is primarily related to leadership and employee attitudes, the examination of organizational structure is based on evaluating formalization - as the degree to which decision making and behavior at work is determined by rules, policies and procedures (Pugh, Hickson, Hinings & Turner, 1968), and according to which organizations are commonly divided into mechanical (bureaucratic) and organic (Burns & Stalker, 1961; Woodward, 1958). The level of formalization is measured with a 3-item instrument (Olson, Slater & Hult, 2005). A sample item is: “There is little action taken unless the decision fits with standard operating procedures”. Responses were reported on a five-point Likert scale (1 = “strongly disagree”, 5 = “strongly agree”).

**Data Analysis**

In addition to descriptive statistics, reliability and correlation analysis, the hypothesis was tested using hierarchical multiple regression analysis. The level of analysis is the individual employee. Data analysis was conducted using the Statistical package for the social sciences (SPSS 23.0).
RESULTS

Descriptives
Both AL and PsyCap demonstrated adequate internal reliability, yielding Cronbach alphas which are well above the benchmark (.992 for AL and .896 for PsyCap). Although the organizational structure scale (.631) did not reach the generally acceptable level of internal consistency, it can still be considered as a marginally acceptable reliability (Hair, Anderson, Babin & Black, 2010).

The descriptive statistics for main study variables (Table 1) revealed a relatively high level of authentic leadership (M = 3.81) and employees’ psychological capital (M = 3.88). The hotel’s organizational structure is perceived as moderately formalized (M = 3.14), which indicates moderate levels of centralization and employees’ autonomy.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M(SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.41(.49)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>36.47(8.52)</td>
<td>.103</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>8.95(3.74)</td>
<td>.125</td>
<td>.120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.73(90)</td>
<td>.152</td>
<td>-.146</td>
<td>.043</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OS</td>
<td>3.14(.87)</td>
<td>.097</td>
<td>.007</td>
<td>.135*</td>
<td>.002</td>
<td>.631</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL</td>
<td>3.81(.52)</td>
<td>-.015</td>
<td>-.038</td>
<td>-.103</td>
<td>.075</td>
<td>.335**</td>
<td>.992</td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>3.88(51)</td>
<td>-.044</td>
<td>-.128</td>
<td>-.176**</td>
<td>.203**</td>
<td>.245**</td>
<td>.389**</td>
<td>.896</td>
</tr>
</tbody>
</table>

Note: OS = organizational structure, AL = authentic leadership, PC = psychological capital. Scale reliabilities appear in bold. * p < .05, ** p < .01.

Using Cohen’s (1988) effect size criterion, small correlations were found between employees’ gender and education (r = .152, p < .05), employees’ age and education (r = -.146, p < .05), employees’ tenure and hotel’s organic organizational structure (r = .135, p < .05), employees’ tenure and PsyCap (r = .176, p < .01), employees’ education and PsyCap (r = .203, p < .01) and organic organizational structure and employees’ PsyCap (r = .245, p < .01). Medium correlations were only established between organic organizational structure and AL (r = .335, p < .01), and AL and PsyCap (r = .389, p < .01).

Hypotheses Testing
The first hypothesis, predicting a direct impact of perceived authentic leadership on employees’ psychological capital, was tested using hierarchical multiple regression analysis where the control variables of employees’ gender, age, tenure and education were entered into Step 1 and AL into Step 2. As seen in Table 2, entering authentic leadership in Step 2 predicted significant variance beyond the covariates (R² = .184). More specifically, the R² change associated with AL is significant (ΔF = 35.583, p < .01), thus showing full support for Hypothesis 1 (β = .367, p < .01).

<table>
<thead>
<tr>
<th>Psychological capital</th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Gender</td>
<td>-.027</td>
<td>-.022</td>
</tr>
<tr>
<td>Age</td>
<td>-.093</td>
<td>-.087</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.167*</td>
<td>-.129*</td>
</tr>
<tr>
<td>High school vs. Bachelor</td>
<td>.057</td>
<td>.038</td>
</tr>
<tr>
<td>High school vs. Master</td>
<td>.089</td>
<td>.065</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>.367**</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.052</td>
<td>.184</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.052</td>
<td>.133</td>
</tr>
<tr>
<td>ΔF</td>
<td>2.392*</td>
<td>35.583**</td>
</tr>
</tbody>
</table>

Note: Standardized coefficients reported: * p < .05, ** p < .01.

For the second hypothesis, which indicated that organizational structure affects the strength of the relationship between authentic leadership and employee psychological capital, we followed the moderation procedure outlined by Dawson (2014).
The results of the moderation regression analysis (Table 3) showed that there is no statistically significant moderator effect of hotel’s organizational structure (β = -.023; p = 0.713), Hypothesis 2 was not supported.

**CONCLUSION**

Despite the fact that the interest in the relationship between authentic leadership and psychological capital is increasing over time, the said relationship is somewhat neglected in the hospitality literature. Therefore, the purpose of the study was to test a model linking authentic leadership to employees’ psychological capital in the hospitality settings.

The results of multiple regression analysis have validated the hypothesis (H1) predicting a positive impact of authentic leadership on employees’ psychological capital (β = .367, p < .01). This is in line with previous research (Schuckert et al., 2018), which demonstrated that authentic leadership has a greater effect on hotel employees’ PsyCap than transformational leadership.

In contrast, the findings did not support the hypothesized moderating effect of flexible organizational structure (H2) in the relationship between AL and hotel employees’ PsyCap (β = .023; p = 0.713). Considering the significant correlations between both organic organizational structure and employees’ PsyCap (r = .245, p < .01), and organic organizational structure and AL (r = .335, p < .01); one possible explanation for this result may be that organizational structure in fact mediates the observed relationship.

**Implications**

This study has both theoretical and managerial implications. Firstly, the study replicates previous research by confirming the positive influence of authentic leadership on employees’ psychological capital. Furthermore, by testing the moderated impact of AL on employee PsyCap in the Croatian hospitality industry, the study answers recent scholarly calls for examining AL effects in different cultural and organizational contexts, and for introducing variables which help clarify the processes underlying the phenomenon.

On the managerial side, the study shows that PsyCap is a significant motivational propensity leading to desired performance outcomes, which justifies the organizational efforts in developing and enhancing employees’ levels of hope, optimism, resilience and self-efficacy. The literature provides evidence of elevated PsyCap levels through Psychological Capital Intervention (Luthans, Avey, Avolio, Norman & Combs, 2006; Luthans et al., 2008; Luthans, Avey, Avolio & Peterson, 2010) and authentic leadership development (see meta-analysis by Banks, McCauley, Gardner & Guler, 2016; Hoch, Bommer, Dulebohn, & Wu, 2016). Although AL emerged in response to economic and social upheavals at the turn of the 21st century, the need for authentic, moral and bona fide leaders remains as strong now as it was then.

**Limitations and Future Research**

The results of this study should be evaluated with the following limitations. Firstly, the research was cross sectional in nature, and therefore a case could be made for reverse causality (that in fact employees’ PsyCap enhances managers’ authentic leadership behaviors). The second limitation concerns the common-source bias (Podsakoff, MacKenzie, Lee & Podsakoff, 2003) as all data regarding authentic leadership, psychological capital and organizational structure came from the same source (employees).

However, ‘in defense’ of such methodological choices, it should be noted that the use of multiple sources is not possible in cases where individual attitudes and personal (psychological) characteristics are measured (Podsakoff et al., 2003: 887). Likewise, previous research (Černe, Jaklič & Škerlavaj, 2013) has shown that only the perception of followers about the authenticity of leadership, and not the assessment of the leader himself, affects the attitudes of employees. However, following the example of the procedures undertaken in similar studies (Paek, Schuckert, Kim & Lee, 2015; Schuckert et al., 2018), future research should involve administering questionnaires in separate time frames. In addition, longitudinal designs which enable a better explication of the nature of AL-PsyCap relationship are highly recommended.

Finally, since authentic leadership is a multi-faceted construct, future research should include the examination of the impact of authentic leadership on psychological capital on different level of analysis (individual, group and organizational), utilizing hierarchical linear modelling (HLM). Also, a mixed method study which would include
a qualitative phase may be incorporated into future studies to further clarify the relationships among the main variables.

REFERENCES

THE IMPORTANCE OF SEPARATING OWNERSHIP FROM MANAGEMENT FOR CORPORATE DEVELOPMENT

Martina Sopta 1, Uršula Kaštelan 2 and Snježana Kaštelan 3

Abstract:
Observing the growth and development of joint stock companies and corporations and comparing trends and issues that are happening in the world and in the Croatian market, we come to the conclusion that these topics are updated, which is evident from a series of processes in the Croatian market related to ownership reorganization of corporations. The paper seeks to define, through a theoretical framework, the basic attitudes of a joint stock company through its historical origin, and explains the turning point that establishes the importance of a joint stock company at the time of the process of separation of ownership from management. In addition to the complexity of a joint stock company, this paper explains the goals of a joint stock company which, in addition to increasing the stock market price, also maximized economic profits and discounted cash flow, all with the aim of maximizing the value of the entire joint stock company.

Keywords: joint stock company, business goals, organization of joint stock company

BASIC DETERMINANTS OF A JOINT STOCK COMPANY

Until the twentieth century, a joint stock company or corporation was not the dominant form of business organization. It was created with a typically narrow, clearly defined purpose, for example to finance overseas travel, construction of canals, railways, colonial commerce, as well as the construction of hospitals, universities and other public interest institutions. The first joint stock companies were created with favorable social assumptions and had an independent legal status from the owners, which was a significant change over other forms. The first joint-stock companies had their predecessors in the collective organizations of the Middle Ages: individual cities, universities and ecclesiastical ranks, which emerged as a kind of protection against central autocratic power and as an instrument of generating collective wealth. What made these organizations quasi-corporate forms was their membership-independent existence and the fact that all assets belonged to the organization, not to individuals. Such organizations existed before, but were not widespread until the prevalence of feudal order. The contemporary form of corporation is outlined by two British laws: the 1844 law allowed corporations to define their own purpose, which gave them free hands in engaging in profit-making businesses, and the 1854 law allowed shareholders limited liability - protecting their assets from the actions of the corporation. Although the trend of strengthening the importance of the corporation was observed in the second half of the nineteenth century, it was not until the first half of the twentieth century that the organization of economic activity in the corporation became a dominant form of business activity, with decisive importance globally and nationally in the most developed countries of the world. Since 1862, limited liability incorporation has been fully permitted in the United Kingdom; it happened in France in 1863; in Germany in 1884, subject to the existence of a mandatory supervisory board for the purpose of representing and protecting the interests of shareholders. Historically, modern economies have emerged from the early 16th to the first decade of the 20th century and have reached the diversity of businesses that can be classified into more or less industries. The modern form of corporation or joint-stock company is a term that has expanded financial risk in a diversified portfolio of millions of individual and institutional investors and has allowed investors to adjust risk to their unique circumstances and preferences. It was a crucial impetus for accelerating economic growth, especially through the opportunity to take advantage of scale and scope globally.

The joint stock company has also proven effective in allocating resources, in creating new technologies, products and services, and in increasing productivity. As a successful and widely accepted institutional arrangement for wealth creation and distribution, the modern conception of the corporation generates wealth in many different forms.
ways: investor earnings, employee compensation, cost benefit for customers, etc. Investors, employees, customers
and suppliers contract resources to the corporation to pursue their own interests. A corporation is a place where the
self-interest of all contributors is realized. As Adam Smith recognized long ago, the realization of individual
benefits through such arrangements usually guides and generates benefits for all. The rise of the stock company
coincides with the need to grow the company. The money needed to finance large companies could only be
effectively collected through corporations. Otherwise, investors were reluctant to accept the potential
responsibilities arising from the actions of managers they did not know or had the ability to control.

Increasing the importance of the company and considerable growth in securities trading has been a relatively new
phenomenon in the last hundred years. Today, a joint stock company (joint stock company) is a legal entity
classified by each kind of invisibility of ownership and business continuity. An incorporated company or a joint
stock company is characterized by a legal entity that is completely separate from the personality of its owners, and
the most significant characteristics of that entity are: 24

1. a company under which a joint stock company may own property, enter into contracts, sue and be sued;
2. business continuity independent of the permanence of its shareholders;
3. equity represented in transferable securities - shares;
4. limited liability of the owner in the amount of paid-in share capital
5. authorized management consisting of elected directors whose power is limited by law, incorporation acts,
   internal management acts and the will of the shareholders who have elected them
6. The profits of the corporation are subject to taxation.

Therefore, it is characteristic of joint stock companies that the role of the owner and the role of the manager are
performed by two different structures, the shareholder structure, ie the shareholder on the one hand and the
management structure on the other. The role of the shareholder is limited only to overseeing the management of
the corporate business which is entrusted and which is realized by the management team or the complex
management structure. Therefore, the choice of management and appropriate management structure, separation of
ownership and management, and internal control mechanisms should be particularly considered with a joint stock
company. The industrial structures from which the joint-stock type creations derive have been systematically
studied since the late nineteenth century and are associated with the Cambridge School, especially with the great
name of A. Marshal's economic science. Notable is his analysis of a representative company that, in grosso fashion,
described based on a demand and cost analysis, on the one hand, and an analysis of the conditions under which the
firm makes maximum profits 25. After the Great Economic Crisis, the works of J. Robinson in the United Kingdom
and E. Chamberlin in the United States indicated that perfect competition was not prevalent, but a far more
representative form of market structure was one established under monopolistic competition. More serious and
systematic work not only on the study of the firm, but also on the study of the industry (as an environment of the
firm) was started in the 1950s by: H. A Simon 26, E. Penrose 27, J. Marcha, J. Bain 28, WJ Baumola 29, O Williamson 30,
etc., and has intensified to this day so that there is, I dare say, almost endless literature 31.

Separation of Ownership from Management

Joint-stock companies can be formed by transforming an existing foreign-owned company into a joint-stock
company, further by transforming a partner company into a joint-stock company and by organizing a new joint-
stock company. Joint-stock companies have different ownership structures and are controlled in different ways.

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29 See: J. S. Bain: “Barriers to New Competition” Harvard University Press, 1956
31 See: O.E. Williamson: “Managerial Discretion and Business Behaviour”, AER, 1963. Also see: OF Williamson: “The Economics of
   Discretionary Behavior”, Prentice-Hall, 1964
32 For more information on earlier firm theories and critical observations, see: F Machlup: “Theories of the Firm: Marginalist, Managerialist,
   Morris, A. Woods (eds): “The Corporate Economy”, Macmillan, 1971. Modern aspirations in company theories have been extensively
   Cheltenham, UK - northampton, MA, USA, 2002. About developments in the field of economics of an industrial organization , See: F.M.
   Massachusetts, 1990.
It is important to distinguish between public and private joint stock companies at the outset. According to Orsag, large companies have the character of “public” companies because they are open to the general public, whereas private companies mean smaller companies that are owned by a smaller number of shareholders or families and their shares do not trade on stock exchanges or other organized capital markets.

Further reflection leads to the conclusion that separating the management function from the ownership role created all the prerequisites for a different symmetry of power compared to traditional entrepreneurial organizations. Based on the structure of the joint stock company and the management structure chosen, there is a need for a deeper consideration of the phenomenon of separation of ownership and management, and this is done using agency theory, which poses the principal agent problem as follows, to ask whether managers and owners have identical goals or whether however, these goals differ (diverge, converge). So the separation of ownership and control in an open corporate governance system results in two problems: the first is an agency problem that results in high agency costs in the relationship between managers and owners, and the second is the problem of short-term orientation when evaluating performance.

Many business owners owned only a small share of the ownership structure and had relatively less influence on managerial decisions. They were incapable of expressing any form of effective control to us by management who, theoretically speaking, was chosen to represent their interests. The first corporations were created with favorable social assumptions and had an independent legal status from the owners, which was a significant change over other forms. The first corporations had their predecessors in the collecting societies of the Middle Ages: individual cities, universities and ecclesiastical orders, which emerged as a kind of protection against central autocratic power and as an instrument of generating collective wealth. What made these organizations quasi-corporate forms was their membership-independent existence and the fact that all assets belonged to the organization, not to individuals. Such organizations existed before, but were not widespread until the prevalence of feudal order. The modern corporation form is a term that has expanded financial risk across a diversified portfolio of millions of individual and institutional investors, and has allowed investors to tailor risk to their unique circumstances and preferences. It was a crucial impetus for accelerating economic growth, especially through the opportunity to take advantage of scale and scope globally.

The corporation has also proven effective in allocating resources, in creating new technologies, products and services, and in increasing productivity. As a successful and widely accepted institutional arrangement for wealth creation and distribution, the modern conception of the corporation generates wealth in many different ways: investor earnings, employee compensation, cost benefit for customers, etc. Investors, employees, customers and suppliers contract resources to the corporation to pursue their own interests. A corporation is a place where the self-interest of all contributors is realized. As Adam Smith recognized long ago, the realization of individual benefits through such arrangements usually guides and generates benefits for all. Structurally, viewing the concept of corporations through the prism of ownership can be selectively viewed, but it is undeniable that the importance of separation of ownership from management becomes greater the greater the stock company is, as best illustrated by examples from Croatian practice.

OBJECTIVES OF A JOINT STOCK COMPANY

The goals of a joint stock company are multifactorial, but they can be differentiated into traditional goals, a modern approach to traditional goals, and maximizing owner wealth. It is also worth pointing out that the natural financial goal of a joint stock company is also to maximize its present market value. It is to be expected that the maximization of value actually maximizes the value of the owners of a joint stock company or shareholders who can dispose of that wealth at their discretion.

Conditions of Perfect and Imperfect Market

In the conditions of a perfect market, there is no potential conflict between the owners and the creditors of the company, because they are all just investors trying to secure the most profitable position. Because the perfect market operates without friction, there are no transaction costs or taxes that would forcibly limit the modification.
of an investor's occupied position so that they always choose a better position. So the goal in a perfect market is the same for everyone, which is to maximize the value of a joint stock company. While there are no conflicts in the perfect market, they do occur in the imperfect market between owners and shareholders and creditors. In an imperfect market, the goal is to maximize the wealth of owners, which is contrary to the interest of creditors. Therefore, creditors seek to collect their claims regardless of the ultimate goals of the shareholders. Then there is the problem of agents when certain interest groups conduct business for other interest groups from the internal environment of a joint stock company, which creates the possibility of conflicts of interest. However, this problem will be presented in more detail in the next chapter. Finally, it is concluded that the common interest of all investors towards Orsag is compounded by the long-term goal of increasing the value of its shares in the capital market.

**Homogeneous expectation**

A homogeneous expectation stems from the business environment in a perfect and fully efficient market where all investors are driven by the same goal of maximizing the value of the company.

**Acting without friction**

Acting without friction in the market means doing business without conflict or conflict. If we include the financial compensation aggregate in order to realize the business without friction, we will notice that this aggregate depends on the size of the joint stock company, and the size of the company among other things is definitely determined by the number of employees. It is not surprising, then, that financial compensation can be considered a function of the number of employees and it can be concluded that the higher the number of employees, the greater are the financial compensation of the managers who manage them. There is no doubt that the use of status symbols is also contingent on the number of employees who determine the size of a joint stock company, which leads to the conclusion that a manager of a large and powerful joint stock company cannot act without simultaneously having the appropriate status symbols. This is also true here: the larger the number of employees, the ceteris paribus, the more attention is paid to status symbols. The manager was not selected, of course, to receive high financial compensation, to enjoy the status symbols, but was chosen because he must earn a certain level of profit to convince the shareholders (owners) of the corporation to continue to retain their own investments in the shares of the corporation, which they seek. satisfy all the claims made by all participants in the perfect market.

**Homogeneous product**

The homogeneous product is intended for the perfect market and it brings together the interests of many different parties, thus completing the ultimate goal of the joint-stock company.

**Traditional Goals**

The ability of a joint-stock company to survive and develop in the future depends on the achievement of traditional goals, the most important of which is the achievement of a satisfactory level of profit, the survival of the joint-stock company and profit maximization.

**Profit maximization**

Most joint stock companies are profit oriented, so they exist to make money. The standard assumption in most economic models is that the primary goal of a joint-stock company manager is to maximize its profit. The manager must sell the optimal quantity of products and enable the joint stock company to produce efficiently and with the given amount of inputs and given technology maximize the output. Managers while maximizing profits can have other goals. For example, if a manager wants to control a large company, he may decide to maximize sales rather than profit. At the same time, the manager can spend the company money on luxury offices, planes, and other comforts, thus reducing the profitability of the company in order to increase its own comfort. Different forces keep managers from deviating from profit maximization. If a company operates inefficiently and not-for-profit, there is a potential for it to be thrown out of business by competitors that better maximize profits. Managers who lose their jobs when their stock company loses the market or are fired due to incompetence or laziness find it difficult to find a new job. An incentive, such as company stocks and other bonuses, motivates managers to maximize profits. But

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with all of the above, the assumption is that profit maximization is a reasonable closest value to the goals of a stock company.

Survival of a joint stock company

The goals must be flexible as companies or joint stock companies operate in a turbulent and uncertain environment. The survival of a joint stock company is certainly a prerequisite for all other goals, since without the existence of a legal entity, there is no possibility of realizing business projects from which all those products are intended for the purpose of operation of a joint venture - stock company derivatives. It means becoming and surviving before achieving the other goals of the joint stock company.

Satisfactory profit

Achieving Satisfactory Profit is a goal that is directly in conflict with measuring profits by an accounting convention. Therefore, it is necessary to distinguish the purpose of the joint stock company and the realization of the individual’s business ideas. Analyzing the literature on microeconomic theory, it follows that the objective function of an economic entity, and therefore of a stock company, is to maximize profits. An analysis of actual corporate behavior, however, has shown that joint stock companies are often willing to sacrifice a certain amount of profit in order to gain an increased share of the market in which they sell their products. Scientists also believe that corporate management wants to achieve an appropriate growth rate over an indefinite period of time. If they dive deeper into the internal structure of the joint stock company it is characterized by, it is said that it is acceptable for them to achieve a satisfactory level of profit. There are many reasons for this, but the most significant is the existence of a particular managerial utility function, on the one hand, and a existential principal-agent problem, on the other.

All of the stated goals of a joint-stock company, which are found and extracted from established company theories, primarily have the defining value of corporate behavior under static conditions. However, for goals to become operationally usable at all, it is imperative to make them measurable in order to accurately and reliably quantify at the same time taking into account that time is a relevant and extremely important variable of corporate behavior. Drawing on the relevant literature on financial management, it seems that joint stock companies should focus on net worth or equity.

By thinking critically about the traditional goals of a joint stock company on the basis of industrial reality (considering the dispersion according to the size of the joint stock company), on the one hand, and after the theoretical treatment of the joint stock company, on the other, one can say that the traditional approach is insufficient, which does not mean that it is worthless. Not only parameters such as cost and demand, but also the goal function of behavior, which, in the traditional spirit, is reflected in profit making, are still important. However, the approach to a joint stock company, by which it appears that it is a passive reactor for signals from the economic environment, can by no means satisfy and no longer satisfy the premise of profit maximization. A joint stock company is not a passive reactor to environmental stimuli, though it may be, primarily because a joint stock company may influence the demand for its products through advertising as an example. It can also manipulate the prices of its products and thus affect the amount of profit generated. Etc. It is plausible for a joint stock company to make a profit, but it is doubtful whether this is the maximum profit or whether this profit is a consequence of pursuing another goal. Joint stock companies, as strongly suggested by Baumol, Marris, Williamson, tend to pursue other goals: sales maximization, maximization of managerial utility function, maximization of value, etc. corporate behavior. It is still unresolved and the question of the relationship between profit and non-profit-oriented goals remains open. As each goal individually continues to have stronger explanatory and predictive values, this relationship issue is likely to remain unresolved.

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44 According to prof.dr.sc. Orsaga profits cannot be used directly to meet the needs of individuals and to realize their business ideas. More in: Orsag, S.: Securities - Investments and Financing Instruments, Revicon, Sarajevo, 2011, p.131
45 Profit maximization inherent in neoclassical enterprise theory, and a satisfactory level of profit is discussed in behavioral enterprise theory. While company growth theory mentions market size, growth rates, etc. While focusing on the managerial utility function is inherent in Williamson's theory of discretionary managerial behavior, another particular company theory, agent theory deals with the interaction of principals (shareholders) and agents (managers). A good introduction to these theories can be found in A. Koutsoyiannis: "Modern microeconomika", translated by Mate, Zagreb, 1996.
46 Equity is subject to a number of application areas: commercial law, accounting, financial management, etc. Financial management speaks to the wealth of shareholders and considers it an important purpose for an enterprise. The growth of the incorporated company, the note bene, is increasingly dependent on shareholders, so the so-called share-holder value concept becomes an indispensable concept of assessing the state and perspective of a corporation. See more about this concept in: Ivona Santini: “Investigating the Possibilities of Applying Share-Holder Value in Croatian Enterprises”, M.Sc., Faculty of Economics and Business Zagreb, 2001.
Axiomatic applies: at any time, a joint stock company will endeavor to achieve one or more of its goals with respect to its limitations. According to the neoclassical view, a joint stock company faces a given cost condition, in particular it has its own marginal cost function, on the one hand, and the position and slope of the demand curve from which the marginal revenue function is generated, on the other. Based on the marginal principle, it sought to maximize the profit level of its own production. It is obvious, therefore, that a joint stock company passively accepts not only the conditions of business, but also the consequences of this and this situation, which may include stable or declining profits, but also departure from the industry in which it exists and in which it operates.

In contrast, an active behavior of a joint stock company involves its endeavor over time to modify itself, or to shift the exogenously imposed constraints on the cost-demand situation, to stay in the neoclassical point of view, in order to achieve the set goals more effectively. Advertising, research and development, product diversification, communication, integration and takeover indicate the forms by which a joint stock company may change these restrictions. As all these influential variables relate to large and powerful companies, the stock company, which ignores the traditional approach, makes it clear that the concept by which economic entities are active, that is, can change exogenously given constraints, is far more credible and effective. Increased effectiveness is condensed in the discretionary behavioral syntagm, and it is, notably benevolent, in direct contrast to the passive behavior otherwise adopted by the neoclassical microeconomic paradigm.

Although the distinction between passive and active behavior of a joint stock company is indispensable, at least to discern the difference in the number and type of relevant decision parameters, it by no means suggests that they are substitutes. On the contrary, passive and active behavior must be viewed and considered complementary. The traditional approach, as emphasized earlier, focuses on demand, on the one hand, and cost, on the other, and from there, is operated within a two-dimensional decision space. The modern approach respects the traditional foundations of decision-making, but expands them with its own active action. Namely, it seeks respect as an exogenous variable, but it is also “reworked” in such a way that it will at the same time be an instrumental variant by discrete decisions of consideration, differentiation, etc. This disturbance of demand, though a mere extension, nevertheless conceals a substantive significance that is primarily a reflection of the fact that corporate discretion in decision making changes its external, environment, industry, forward industrial demand, changing its slope and / or position. If discretionary behavior is approached by another stock company in the industry, and this is conditioned by the sine qua non of their capabilities, then things are conditioned, and industrial demand becomes an apparently exogenous variable strongly imbued with the interactive action of the stock company in the industry. In these and such conditions, it is difficult to clearly and unequivocally delineate what is the cause and what is the consequence of changes in industrial demand, as would be possible in the traditional approach. The modern approach, traditionally traditional, of immanent concepts and developed tools, while uncertainty can be handled, can easily be offered by various factors, conditions and circumstances that are the last mutually effective discretionary behavior of a stock company in the industry.

It would be good to mention and apply corporate view of costs, which would be unreasonable due to the limited space, but it can be concluded that the discretionary behavior of a joint stock company results in the fact that it can, by manipulating the decision variable, profit independently of the general population development, which is traditionally to approach the unthinkable.

The discretionary behavior of a joint stock company, of course, was not only reflected in changes in its external environment, or in the related industry, but at the same time reflected in changes in its own being, that is, its own interior. Regarding the interior, the traditional approach had nothing to say since the joint stock company is black for him, and we would add an empty box as if it had no internal structure. If for a neoclassical enterprise in which the role of entrepreneur, owner and manager is integrated in one person, with the irrelevance of the internal

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49 Take the example of economies of scale, and numerous studies have been made in which to analyze economies of scale, the relationship between profitability and size of a joint stock company, industrial concentration, growth, etc. See: B. S. Yamey (ed): “Economics of Industrial Structure”, Penguin Books, Ltd., harmonsworth, Middlesex, England, 1973.

structure and we can agree, it would be at least unreasonable for managers to run a joint stock company, since it is internal an organizational mechanism, on the one hand, and an internal decision-making mechanism, on the other, processes all the factors by which discretionary behavior results in the environment being overtaken by a stock company.

Very early on, there was a need to examine how managers, starting from the application of scientific principles developed in the School of Management Science, could effectively work to achieve the goals they set. And despite all efforts, the science of management, as well as the later theory of bureaucracy, could not cope with the problems not only of growing bureaucracy within the corporation, but also with the fact that only a small number of people at the top of the hierarchy manage huge and diverse resources. Introduced and applied internal organizational rules, which enabled the functioning of top management, entailed rigidity in the behavior of certain parts of the organization, which, as research has shown, led to a decrease in the efficiency of functioning of the internal organizational structure. The decline in efficiency was particularly reflected in the inability to compare the results that individual parts of the organization must obtain with the results they set as goals, on the one hand, and in the inability to resolve conflicts between the goals set and assigned to certain parts of the organization. Although the behavioral theory of the firm more deeply identified the causes of organizational inefficiency, it was still incapable of offering workable solutions that would enable the effective functioning of the organization.

The unresolved problems of organizational functioning efficiency, as O. Williamson argues and proves, concern only a unitarily organized company, which implies that the manager manages all the company’s products through functional parts (finance, production, sales, etc.). This and such a situation is characteristic of SMEs. However, for large companies or joint stock companies, imposing and maintaining a unitary organization would cause the efficiency of the organization to decline for a variety of reasons: loss of controls due to difficult information flow, difficulty coordinating an enormous number of operations, difficulty preventing divergent behavior by lower level managers and other problems as argued by Cyert and March. From there, a unitary organization should be replaced by another organizational form, especially the multidivisional form of organization, but it is best to leave that line of thought for future work. This critical review seeks to round off the whole of the traditional goals of joint-stock companies.

Maximizing Owner Wealth

Often, profit maximization is seen as an appropriate goal for the company, but it is not as comprehensive a goal as maximizing shareholder wealth. The key role of top management is to balance the expectations of different stakeholders. A smart and efficient financial manager makes decisions that increase the current value of the stock and the wealth of its shareholders. According to some other experts, managers often do not have the same interests as shareholders or owners, and therefore owners have primary and secondary expectations. Primary expectations are reflected in the return on financial assets, while secondary expectations are additional value based on the concept of economic value and the time value of money. It follows that value is set as the goal of a joint stock company’s operations. Economic value is defined by the value at which the value of any economically viable asset is determined by the present value of the expected cash flows from such assets, which is determined from the risk of inflow of expected cash flows. In addition to the economic concept of value, there is a temporal concept of value for money because money, as the general equivalent of consumption, has its time price, that is, it is necessary to calculate the riskiness of future cash flows into the price of money, thus creating risk and uncertainty another dimension of value.

THE COMPLEXITY OF THE ORGANIZATION OF A JOINT STOCK COMPANY

There is no doubt that a joint stock company is an extremely complex entity. It is not only an economic and legal entity, but is also an organizational, human and technical entity that, based on engaged and spent production factors, creates products and services intended for consumption, behind which there is solvency demand. It is not

surprising, then, that the joint stock company is the subject of many science studies, including economics. As economics is already a very well-structured science, each of the relevant areas of economic science studies joint stock company from a specific point of view. The most important economic approach to a joint stock company is primarily because profit is an economic category par excellence. It will be shown, however, that this will not be sufficient and we will also have to refer to the descriptions of the joint stock company through the prism of the geographical aspect of the business, as well as through economies of scale and economies of scale, with a view to describing and getting to know such a complex entity such as joint stock company.

Geographical Aspect of Joint Stock Company Operations

For the needs of joint-stock company growth and development, the geographical aspect of business is indisputably important, given that joint-stock companies are often multinational in order to carry out different business operations in numerous countries. The geographical organizational structure of a joint stock company is presented through the division of work within the company, and the grouping and linking of related or similar businesses in such a way as to form lower organizational units by geographical area or territory with regard to their purpose of origin. Each territorial unit brings together all the necessary functions in its territory. Multinational joint-stock companies operate in a larger geographical area and often include vertical and horizontal integration and the structure of conglomerates.

An Approach to Observing a Joint Stock Company through the Quantity and Type of Product

The approach of observing a stock company through quantity into product type is best described using economies of scale and economies of scale. In a situation where average costs decrease as output increases, a stock company is said to have economies of scale. If a stock company enjoys economies of scale at all levels of output, then it is efficient for the company to produce outputs for the entire market. In the spirit of the traditional approach of microeconomic theory, economies of scale are realized by coming down the long-run average total cost curve, but when the critical amount of production in an industry is reached, then the state of the industry is no longer a stock company environment to which it must adapt, but rather it is a changing industry, in terms of efficiency and prices, in terms of concentration, etc. Simply put, a joint stock company has a gravitational force that influences its environment. Numerous studies have been made in which the analysis of economies of scale, the ratio of profitability and size of a joint stock company, industry concentration, growth and other variables. The growing economy of scale is the cause of the necessary transformation of a simpler type of company into a joint stock company. The cause of this transformation is the diversification or expansion of distinctiveness, which is possible as stated in the geographical aspect horizontal (when merging joint stock companies), vertical (when merging joint stock companies according to the logic of the production and technological chain) and conglomerate (when merging joint stock companies from other activities). The phenomenon of diversification, from there, generates further legitimacy, especially important for the growth of a stock company, and is known as the economies of scale. Just as economies of scale are a significant cause of profitability, so too, if not more, applies to economies of scale. Furthermore, it is not possible to meet the growing demand unless the cost structure of the company is changed in such a way that variable costs are replaced by fixed costs. From a diachronic point of view, most businesses in most industries, as a rule, have followed the path of maximizing profits based on growing economies of scale, generating cash flow and thus turning into such large and complex entities as joint stock companies. Today, we call them multinational corporations whose economic strength is surpassed by only a dozen of the world's most developed countries.

Price or Profit Characteristics of a Joint Stock Company

Contemporary joint-stock companies should, first of all, appreciate their striking existence and operation for the fact that they have been guided in their economic activity by a strong effort to make profit for an indefinite period of time. Most joint stock companies are profit oriented, meaning they exist to make money. The standard assumption in most economic models is that the primary goal of a stock company manager is to maximize its profit. The manager must sell the optimal quantity of products and enable the joint stock company to produce efficiently and with the given amount of inputs and given technology maximize the output. Managers in addition to maximizing profits can have other goals that have already been set out in the work.

The growth and development of enterprises, especially since the mid-19th century, has intensified foreign business, primarily because of the tightness of their domicile markets. A century later, the internal transformation of the company into a special form of enterprise, a corporation managed by managers, was clearly noticed, so it is not surprising that the establishment of the manager company or managerial capitalism is a syntagm.

Large companies, with strong international operations, and the need to set up their own subsidiaries or branches, faced the problem of pricing within the economic flows under their control. This price could no longer be described by standard models of economic theory, especially microeconomics, but sought to determine by internal calculation that made accounting, along with corporate policy, that relevant entity that cared about those specific prices. Especially after the consensual understanding that perfect competition and monopoly are not the only market structures that exist in economic reality, but are also monopolistic competition and oligopoly, microeconomic theory could no longer ignore the prices that are formed within the enterprise. In the area of price phenomena, the contribution of J. Hirshleifer, a theorist of microeconomic provenance, to which the transfer pricing syntagma is related, is a particular contribution to the company’s internal operations. He argued that companies, whatever economic flows they design and realize, should always respect and apply the well-known and widely accepted axiom of microeconomic theory, known as the concept of equilibrium, that is, maximizing company profits so that it has no rational reason to would change its economic position with its decision or action.

CONCLUSION

After conducting the theoretical analysis, it can be concluded that there is certainly a major problem of separation of ownership from management in Croatian joint stock companies, which, in the thirty years since the formation of an independent state, and thus the liberal market, has encountered a pronounced problem that accumulates in the failure to achieve their set corporate goals. The most similar example to the current situation is the US economic market, which in the 1960s produced the so-called the managerial revolution, and it exactly separated about thirty years after the great global crisis that marked a new beginning for their market. It is interesting that it overlaps with our time with the end of the business cycle of start-up investors or founders of these same joint stock companies, who then find it difficult to manage or leave it to the hereditary generations in the family. It is important to point out that the problems are as big as the corporation grows and thus it grows beyond the ability of a single owner or family to manage the business. This, of course, raises the question of the problem of adequate professional management, which is separate from ownership and which could not develop for generations precisely because of the fact that in Croatian companies the owners and family members were also managers.

REFERENCE


63 Today, there is talk of internationalization and globalization. Interestingly, there is still no overwhelming or unambiguous answer to the question of whether internationalization or globalization is dominant. The reader can find extremely referenced references in: P. Hirst, G. Thompson: “Globalizacija: međunarodno gospodarstvo i mogućnost upravljanja”, Liberata, Zagreb, 2001.
64 When cost-based pricing is operationalized within company accounting, then calculations are discussed. A concise and stimulating description of the calculation for international business purposes can be found in: B. Matić: “Međunarodno poslovanje”, Sinergija, Zagreb, 2004.


THE RELATIONSHIP BETWEEN BUSINESS ACUMEN, MACRO-ENVIRONMENT AND FIRM PERFORMANCE OF SMMEs
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Abstract:
The Small Medium and Macro Enterprises (SMMEs) all over the world have proven to be the key to alleviating poverty, boosting economic growth, and positively affecting sustainable job creation. Even, with the more focused financial and non-financial support that SMMEs receive, the failure rate of SMMEs in South Africa is still regarded as the highest in world. SMMEs are affected by the internal and the rapidly changing external environment, which if not properly managed, affects their sustainability and thus impact negatively on the economy of their respective countries. The researchers adopted a quantitative research approach and selected a sample from SMMEs registered on the database of the Gauteng Enterprise Propeller in Gauteng, that has been in business for three or more years. A convenience sampling approach was used to establish contact with the SMME owners, as they attended a monthly scheduled workshop. They consent and agreed to complete the self-administered questionnaire. A sample size of n=397 was retained and used in the analysis. Factor Analysis on EE extracted two factors: factor 1 (business acumen) indicated a significant strong positive relationship with FP; whilst factor 2 (macro-environment) indicated a weak positive relationship with FP. In addition, the IE results indicated a significant, strong, and positive relationship with FP. The study contributed to existing literature on the impact of the internal and external environment on SMMEs. It further determined that different external factors, affects FP and that these factors differ amongst SMMEs. The outcome of the research assisted the GEP to aligning training needs of SMMEs in the different sectors to understand the impact of the EE and IE on their FP with the aim to counteract the negative impact of the external and internal environments on FP of SMMEs.

Keywords: Small Macro and Medium Enterprises, Firm, Business, Performance, External Environment, Internal Environment, Biographic.

INTRODUCTION

The Small, Medium and Micro Enterprises (SMMEs) are considered to be a core ingredient in economic growth, as they stimulates the creation of jobs, brings along social stability and poverty alleviation (Jasra, Khan, Hunjra, Rehman & Azam, 2011: 274). Govori (2013: 701) research supports this notion and affirms that across the globe the development of SMMEs is prioritised and linked to job creation, economic growth and social equity. However, the economic challenges faced by sectors that were generating income and creating jobs for the country in particular the mining and oil sectors, needs a replacement in the form of different innovative interventions that can mostly be found only within the entrepreneurship space (Hussain, Farooq & Akthar, 2012: 1581-82).

Even with the focused attention in place by the government of SA, the failure rate of SMMEs is too high, with an estimated survival rate of 37% in the duration of four years and 9% in 10 years (Zulu, 2014). Due to the benefits associated with SMME development and sustainability, most countries are focusing their attention and resources to develop and support SMMEs (Aremu & Adeyemi, 2011).

Chimucheka (2013: 786) stated that even with the interventions received from government, SMMEs are still faced with obstacles and challenges. The Department of Trade and Industry (DTI, 2012) and Small Enterprise Development Agency (SEDA) (2012) both identified financing, poor management skills, customer relations, market access and product quality as the most critical challenges facing SMMEs in South Africa. Reymen et al. (2015: 373-74), mentions that the operational environment in which entrepreneurs operate calls for different strategic thinking process because of its uncertain nature.

Awang, Ahmed, Asghar and Subari (2010: 133) conducted a study in Malaysia (Peninsula region) amongst Agro-based enterprises and reported that SMMEs operates in a rapidly changing environment which is influenced by different internal and external factors and therefore requires strong but flexible strategies that will ensure innovation for sustainability. Barnard, Kritzinger and Kruger (2011: 124) mentioned that the location of business is an important element for sustainability therefore a proper assessment of the clientele, accessibility.

Thus, Dean and Thibodeaux (1994) as cited in Hewitt (2012: 35) operationalised a firm’s strategy as their ability to change and adapt according to their external environment requirements. They learn from their past experiences to focus on renewal and growth, and it is a form of thinking (Hewitt, 2012: 36).

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The external environment is made up of the customers, suppliers, distributors, competitors, legislation, political, social, cultural, technological, innovations amongst other factors (Adeola, 2016: 159). Fereidouni, Masron, Nikbin and Amiri (2010: 192) mentions that the external environment, if not managed and controlled properly can have a tendency of affecting the motivation of entrepreneurs in starting a business therefore the government need to ensure the creation of an enabling environment.

The following is the proposed conceptual theoretical model stipulating the dynamics between Firm Performance (FP), Internal Environment (IE), External Environment (EE) and Entrepreneurial Orientation (EO).

Figure 1. Proposed conceptual theoretical model stipulating the possible relationship between the firm’s External Environment (EE), Internal Environment and Firm Performance.

Research Questions

The following research question is formulated:

To what extent does a firm’s external environment, internal environment, and firm performance relate to each other?

The following research sub-questions were set:

- RQ 1: What is the relationship between External Environment (EE) and Firm Performance (FP)?
- RQ 2: What is the relationship between Internal Environment (IE) and Firm Performance (FP)?
- RQ 3: What is the relationship between the constructs External Environment (EE), Internal Environment (IE), Firm Performance (FP) and their observed variables?
- RQ 4: To explore and report descriptively on Firm Demographics

LITERATURE REVIEW

A study conducted by Abor and Quartey (2010: 220 - 21) in Ghana and South Africa estimated that SMMEs contributes 61% to employment in terms of job opportunities and between 52% and 57% to GDP. Bowler, Dawood and Page (2006) concurs by mentioning that SMMEs are responsible for more than 70% of jobs created in South Africa and Olawale (2014: 923) agrees and further mentions that for the SMMEs to continue to create sustainable employment opportunities there is a need for continuous establishment of new SMMEs.

Firm Performance

According to (Okeyo, Gathungu & K’Obonyo, 2014: 17), firm performance is characterised by profit growth, growth in sales, growth in return on assets, customer satisfaction improvement and employee satisfaction. The growth and sustainability of any firm can be determined by its success, which can be attributed to its performance (Al-Matari, Al-Swidi & Fadzil, 2014: 25).
Firm performance is important for both big and small organisations in that it ensures creation of sustainable jobs, eradication of poverty and economic growth for countries therefore it is important that factors that influence growth of businesses is studied (Okeyo et al., 2014: 14). Firm performance and competitive advantage are also influenced by the internal resources that they have, therefore it is important for management to focus on sourcing and capacitating their resources to ensure differentiation (Bridoux, 2004: 3). Furthermore, Soriano (2010: 468) identified entrepreneurial orientation, creativity, innovation, price and product differentiation, ability to collaborate with other firms and ability to access private sector funding as some of the core strategies that firms should employ in order to realise improved sustainable performance.

Civelek, Çemberci, Artar and Uca (2015: 17-18) mentioned that within the context of a challenging environment that firms operate in, the following six dimensions should be prioritised if they want to maintain a sustainable business and undo competitors. These include creating distinctive knowledge within their organisations, managing knowledge that enables them to stand out, managing the ever-changing business environment, generating and nurturing organisational intelligence, producing organisational knowledge and lastly enhancing and managing their supply chain processes as a means to effectively and efficiently improving on their strengths and counteracting on their weaknesses.

**Internal Environment**

Fatoki (2014: 926) explains the firm’s internal environment as part of the business that is within the span of control of management and can be modelled to grow and sustain the business performance, he further identified the following as the firm’s internal factors customer services, competent and adequate staffing, marketing and other functional skills. Pearce and Robinson (2013: 164), stresses the importance of the firm’s internal environment by explaining that in order for companies to achieve their set objectives they need to analyse their internal capabilities through either value chain analysis, functional analysis or Strength, Weakness, Opportunities and Threats (SWOT).

In addition, Venter (2014: 117) also discussed the five elements that influences a firm’s internal environment as financial capital, physical capital, human capital, organisational capital and technological capital, further that some of the important resources are tangible and intangible. According to Venter (2014: 119–121), intangible resources like human resources, innovation resources and reputational resources create a huge competitive advantage and they are not easily duplicated by competitors. Hitt, Ireland, Sirmon and Trahms (2011) explains that proper management, formulation and implementation of strategy allows firms to counteract future challenges and uncertainties emanating from the current operational environment. SMME’s therefore need to develop and apply different enabling strategies that are benchmarked with those of competitors within their industry and implement them innovatively to create competitive advantage (Wingwon, 2012: 143-144).

The internal environment is characterised by a number of functions and the innovation has been identified as one of the powerful tools to improve firm performance (Ahmed, Kristal & Pagell, 2014: 59; Caccioliatti & Lee, 2016: 2). Baregehe, Rowley and Sambrook (2009: 1334) defined innovation as “the multi-stage process whereby organizations transform ideas into new/improved products, services or processes, in order to advance, compete and differentiate themselves successfully in their marketplace”. In support of the above definitions, OECD (2005: 47) mentioned that firms can innovate in either, some of all of the four categories, product innovations, process innovations, marketing innovations and organisational innovations.

**Internal environment and firm performance**

For businesses to be sustainable, they need to formulate and implement strategies that are in line with their available internal capabilities and resources (Indris & Primiana, 2015: 192). Hough et al. (2011: 149) identified the following five types of competitive strategies that businesses can implement to improve their competitive advantage against their competitors while improving their market base and performance, i) low-cost provider strategy; ii) broad differentiation strategy; iii) best-cost provider strategy; iv) focused or market niche strategy based on cost low cost and; v) focused or market niche strategy based on differentiation. Smit and Bruwer (2014: 31) claimed that businesses should ensure a strict oversight on micro economic factors of a business because they have a tendency of affecting the operations negatively, the notion is supported by a majority of researchers who concede that a firm’s internal environment can be controlled and managed in order to ensure conducive operational environment that will yield competitive advantage and positive results (Hough et al., 2011: 112-113; Kuratko, Hornsby & Covin, 2014: 38-39; Kraja & Osmani, 2015: 123).
Innovation has been found to be one of the skills that are needed for entrepreneurs and therefore the firm’s operational environment should be structured in a way that it supports employee innovation (Kreiser & Davis, 2010: 48-49). Atalay, Anafarta and Sarvan (2013: 231-232) in their study investigating the relationship between innovation and firm performance within the Turkish automotive supplier industry, found that only two out of the four innovation types, which is process and product innovation, have a remarkable and noteworthy influence on firm performance.

**External environment**

The firm’s external environment should be managed, studied and observed carefully because of its complex, dynamic and constantly changing nature has the ability to affect the competitiveness of the firm (Venter, 2014: 139). According to Hough et al. (2011: 57) “macro environment” as comprising of all factors that are outside the control of the firm and that affects its operations. Venter (2014: 140-141); Pearce and Robinson (2013: 84); Hough et al. (2011: 57) also stressed the complexity and dynamic nature of the external environment as being made up of socio cultural, technological, legal, regulations, global, political, ecological and economic factors. The external environment is made up of socio cultural, technological, legal, regulations, global, political, ecological and economic factors that all firm do not have that ability to control them but only to develop strategies to counteract them (Venter, 2014: 140-141; Pearce & Robinson, 2013: 84; Hough et al., 2011: 57).

**External environment and firm performance**

Research conducted by Jabeen, Aliyu and Mahmood (2016: 18-22) based on “the moderating effects of external environment on the relationship between market orientation and business performance” concluded that market orientation which is made up of set of norms, standards and procedures that an organisation implements in an effort to provide exclusive service and attract customers, should be aligned to changes in the external environment to ensure improved performance. There has been some extensive studies conducted on the impact of external environment on firm performance in the recent years however, Indris & Primiana (2015: 193) along with to Adeola (2016: 165) for example found that for businesses to be sustainable they need to fully learn and understand the nature of the challenges posed by the external environment on their businesses. Durnev (2010: 37) identified political uncertainty as one of the external factors that firms are exposed to. His study established that business activities, investments and performance tend to be lower when there is political uncertainty especially during the time of general elections due to the high level of unpredictability about who will lead the country and what principles will be applicable to businesses.

**Firm demographics and firm performance**

Although this does not form part of the study and intended analysis, the researcher includes a discussion on firm demographics for further analysis and discussion at a later stage. Various firm demographics factors like age, gender size, income, location and education have an influence on the performance of the firm (Chiliya & Roberts-Lombard, 2012: 468; Vallabh & Mhlangu, 2013: 6). The study conducted by Vallabh and Mhlangu (2013: 8) amongst 322 small to medium enterprises in the tourism sector in South Africa found that there is a positive relationship between gender and firm performance. Despite the fact that Smith, Smith and Verner (2006), Darmadi (2013: 22) and Marinova, Plantenga and Remery, (2016: 15) found that there is no relationship between gender and performance of firms, Hoogendoorn, Oosterbeek and Van Praag (2013: 23) established working teams which consists of mixed genders performs better.

There are significant differing opinions on the relationship between firm size and firm performance as can be seen in the following findings, LiPuma, Newbert and Doh (2013: 834) established that small firms are likely to make mistakes in their pursuit of performance compared to larger firms resulting in poor performance exacerbated by wastages and lack of resources whereas larger firms have the capacity and experience that yield positive results and can also benefit from the economies of scale. Unlike LiPuma et al. (2013: 834), Firm demographics like size, age, industry type, location, and owner can individually or collectively impact on the entrepreneurial orientation, resulting in improved performance (Hewitt, 2012: 215).
RESEARCH DESIGN AND METHODOLOGY

The researcher adopted a quantitative, Ex Post factor, research approach. Ex Post factor is a nonexperimental research approach where the researcher attempted to find reasonable grounds for the cause or existent of a relationship between EO, EE, Firm Biographics and FP by studying the phenomena after it has already happened (Saunders, Lewis & Thornhill, 2007: 117).

Population and Sample

The population for the study were all SMMEs within the Gauteng Province, South Africa. The sample frame was the SMMEs owners that are registered on the database of the GEP and have been in business for three or more years, operating within the five GEP Regional Offices around Gauteng Province. The researcher reverted to convenient sampling aimed and sought a sample size of at least n=600. More than N=2000 structured self-administered questionnaires (Hewitt, 2012) questionnaires were distributed in hard copy format and n=650 were completed and collected; n= 253 were therefore disregarded and a total of n=397 were retained.

Sample Profile

The sample profile of n=397 is discussed below which also addresses RQ4 namely to explore and report descriptively on Firm Demographics. The self-administered questionnaire was split into five sections and will be discussed in the latter part of the chapter.

Biographical for n=394 SMME Respondents

Out of the total sample respondents N = 397, all the n = 397 of SMME owners’ respondent to the age group and gender subsections whilst n = 3 did not respond to the owner, manager and education level parts of the biographical sections. N = 11 did not respond to the strategic management decision and only n = 2 did not answer as to whether they are the founder of the business or not.

SMME Respondents Age Distribution

From the sample profile, 49.4% of the respondents were between the less than 20 to 35 years of age; 42% were between the ages of 36 and 55 years old; and lastly, 8.6% were from the ages of 56 and above. Majority of the
respondents at n=143 represents 36% of SMME owners were between the ages of 26 to 35 years, the total number of youth respondents were n=196 which is 49.4% of the total sample.

SMME Respondents’ Gender Distribution

Out of the n= 397 respondents, 38.3% (152) were females whilst 61.7% (245) were males.

SMME Respondents: Founder, Manager and Strategic Management Decisions

The sample profile shows that out n= 397 respondents who completed the questionnaire, 92.7% were founders whilst 6.5% were not founders. 92.9% of SMME respondents were managers and 6.3% were employees on non-managerial positions. The biggest representative of the SMME owners at 95% confirmed their participation in the strategic management decisions making, 2.3% were not involved and 2.8% did not respond to the question.

SMME Owners’ Educational Level Distribution

A sizeable representation (51.4%) of the SMME owners mentioned their highest qualification as being between grade 12 and lower whilst 47.9% of the respondents have obtained a post school qualification.

SMME Respondents’ Firm Demographical Data

The sample profile reflects that n= 396 and n= 397 SMME respondents answered the business age and business size question respectively. The mean size of the of the business age is 6.90 whilst the mean size of the business size is 6.58 employees. The results are a true indicative of the types of businesses that GEP supports as it gives assistance to businesses from ideation stage to growth stage. The highest SMME owners’ respondents were from the manufacturing sector with 25.7% followed by catering, accommodation and other trade sector at 18.3% and the third place was SMME owners from the construction sector with 11.3%. The lowest participation was from both the mining and quarry and real estate sector with a representation 0.8%. The highest respondents of SMME owners with a total of 32.2% were based in Ekurhuleni Region, followed by Johannesburg with 25.5%. Westrand and Pretoria’s participation were at 15.7% and 13.1% respectively. The lowest respondents were from Sedibeng with 11.6%.

Data Gathering

Collins and Hulley (2014: 59) explain primary data as data collection through the originator of information, for an example one’s own questionnaires, interviews and or surveys.

Measuring Instrument

This study used an adapted structured self-administered questionnaire (EO-FP) (Hewitt, 2012) to ensure standardisation and consistency of responses (Babbie, 2013). The EO-FP self-administered questionnaire comprise originally of the following four sections; section A (Respondent Biographies and Firm demographics), section B (Entrepreneurial Orientation, section C (External Environment), section D (Internal Environment) and section E (Firm Performance) and used a seven responses Linkert scale (1 – 7).

Research Procedure

Upon granting of approval by the GEP to collect data from the SMMEs registered on their data base, the adapted self-administered structured questionnaire accompanied by the covering letter which explained the purpose of the study, voluntary participation, right to withdraw from participation at any time, confidentiality and the benefits of the study to the overall SMMEs were captured and consent form for participation in the study were distributed. The following statistical techniques were employed, Descriptive Statistics, Factor Analysis in particular Exploratory Factor Analysis (EFA) and Pearson’s correlation.
FINDINGS

Descriptive Statistics - External Environment

Table 3: Descriptive Stats - External Environment

<table>
<thead>
<tr>
<th></th>
<th>C1</th>
<th>C2</th>
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<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
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<td>3</td>
<td>6</td>
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<td>4.27</td>
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<td>1.87</td>
<td>1.97</td>
<td>2.06</td>
<td>2.095</td>
</tr>
</tbody>
</table>

Most of the respondents at n=394 out n=397 acknowledged the scarcity of resources (skilled labour/ materials/ machinery), the impact of technology, political environment and cultural shifts within their businesses. In comparison n=386 of respondents are never aware of their competitors. The mean spanned between (M =4.16 and M = 5.27) and the standard deviation varied from [SD = 1.628 to SD = 2,095] which means the responses to the question “How well do you know your competitors” yielded the highest mean (M = 5.27) and the standard deviation of [SD = 1.628]. Most SMME respondents at 62.3% indicated that technology seriously influenced their industry. The lowest percentage of at 15.5 % of respondents specified they never know their competitors. 51.6% of SMMEs respondents are very aware of the cultural shifts that might affect their businesses.

Descriptive Statistics (Internal Environment: n -392)

Table 4: Descriptive Stats - Internal Environment

<table>
<thead>
<tr>
<th></th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
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<th>D7</th>
<th>D8</th>
<th>D9</th>
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<td>385</td>
<td>392</td>
<td>386</td>
<td>396</td>
<td>392</td>
</tr>
<tr>
<td>Mis.</td>
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<td>5</td>
<td>5</td>
<td>9</td>
<td>12</td>
<td>11</td>
<td>4</td>
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<td>11</td>
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<tr>
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<td>5.23</td>
<td>4.68</td>
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<td>4.87</td>
<td>5.41</td>
<td>5.15</td>
<td>2.95</td>
<td>4.71</td>
<td>4.98</td>
<td>5.09</td>
<td>4.09</td>
<td>5.54</td>
<td>4.60</td>
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<tr>
<td>Std. Deviation</td>
<td>1.77</td>
<td>1.74</td>
<td>1.76</td>
<td>1.80</td>
<td>1.72</td>
<td>1.66</td>
<td>1.86</td>
<td>1.80</td>
<td>1.92</td>
<td>1.81</td>
<td>1.67</td>
<td>1.89</td>
<td>1.88</td>
<td>2.08</td>
</tr>
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</table>

Table 13 above displays the items for section D (IE) if the structured self-administered questionnaire, which was made up of 14, items (D1 – D14). N=396 SMME owners responded to item D3 “How often is top management involved in project initiation and support”. received the lowest amount of responses n=377. “The lowest SMME responses of n=377 were noted on the item D8 to the question “how often do leave”. The mean scores varied between (M = 2.95 and M = 5.54), the highest mean response was noted on item D13: “How often is top management involved in project initiation and support” which shows that most of the respondents acknowledged the involvement of top management in project initiation. The standard deviation scores ranged from [SD = 1.662 to 2.076].
Descriptive Statistics (Firm Performance: n = 391)

Table 5:
Descriptive Stats – Firm Performance

<table>
<thead>
<tr>
<th></th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
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<td>373</td>
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<td>12</td>
<td>10</td>
<td>13</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Mean</td>
<td>4.47</td>
<td>3.99</td>
<td>4.73</td>
<td>4.95</td>
<td>5.14</td>
<td>4.77</td>
<td>4.44</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.94</td>
<td>1.83</td>
<td>1.84</td>
<td>1.74</td>
<td>1.83</td>
<td>1.82</td>
<td>1.82</td>
</tr>
</tbody>
</table>

Table 15 represents the descriptive statistics for the respondents on Section E (Firm Performance) of the questionnaire. The mean varied between (M = 3.99 and M = 5.14) across all the seven variables whilst standard deviation ranged from [SD = 1.737 and 1.936]. The highest (M = 5.14) was realised on the item E5 where SMMEs respondent to the question “to what extent does your organisation drive its vision, mission and values?” and item E4 (how often does your organisation track, monitor and measure progress) generated the lowest standard deviation at [SD= 1.737].

RELIABILITY STATISTICS FOR THEORETICAL CONSTRUCTS

Reliability for External Environment

The case processing summary numbers highlights that out of the total sample of n= 397 self-administered questionnaires analysed n=369 were compliant; n=28 which accounts for 7.1% of the sample were excluded which is lower than the norm of between 10% and 15%. The Cronbach’s alpha for the external environment construct is a little below the acceptable minimum required standard for internal consistency of ≤ .70 (a = .678). The mean inter item correlation for reliability for EE is 4-10 of (M = .231), with values ranging from .480 to .414. There is a suggestion of a weak relationship amongst the items.

Reliability – Internal Environment

The case processing summary numbers highlights that out of the total sample of 397 self-administered questionnaire (section D) n=331 were completed properly and n=66, which accounts for 16.6% of the population were excluded which is higher than the norm of between 10% and 15%. The Cronbach’s alpha for the Internal Environment construct is above the generally acceptable minimum required standard for internal consistency of ≥ .70 (a = .851), which is a preferable consistency. The mean inter item correlation stipulated is (M = .290), with values ranging from .435 to .604. There is a suggestion of a strong relationship amongst the items.

Reliability – Firm Performance

Case processing summary numbers for Firm Performance highlights that out of the total sample of n=397 self-administered questionnaire (section E) n=348 were completed properly and n=49, which accounts for 12.3% of the population were excluded which is within the norm of between 10% and 15%. The Cronbach’s alpha for the Firm Performance construct is above the generally acceptable minimum required standard for internal consistency of ≥ .70 (a = .862), which is a preferable consistency. The mean inter item correlation is (M = .471), with values ranging from .243 to .740. There is a suggestion of a strong relationship amongst the items.

EXPLORATORY FACTOR ANALYSIS (EFA)

External Environment

The Kaiser-Meyer-Olkin (KMO) measure of sampling Adequacy and the Bartlett’s Test of Sphericity were applied to gauge the compatibility of the factors. The KMO value for the External Environment was at .722 and adequate as the value that is .6 and above is regarded as adequate (Pallant, 2007: 190). The Bartlett’s Test of Sphericity is significant (p = 0.000) which is less than .5 therefore the scale is acceptable for factor analysis. The study used
Kaiser criterion and therefore the interest is only on factors with 1 and above eigenvalue. The analysis shows only two items with eigenvalue of 1 and above (2.404 & 1.214), they two factors accounts for the 51.685% of the variance.

The factor matrix analysis of the External Environment extracted two factors, Factor 1 is comprising of items C2 and C7& whilst factor 2 comprises of items C6, C5, C1, C4 and C3. For the purposes of this research the two extracted factors will be named as follows; Factor 1 = Business Acumen and Factor 2 = Macro Business Environment

**Internal Environment**

The Kaiser-Meyer-Olkin (KMO) measure of sampling Adequacy and the Bartlett’s Test of Sphericity were applied to determine the compatibility of the factors. The KMO value for the Internal Environment was at .872 and adequate, as the value that is .6 and above is regarded as adequate (Pallant, 2007: 190). The Bartlett’s Test of Sphericity is significant (p = 0.000) which is less than .5, therefore the scale is acceptable for factor analysis. The Kaiser-Meyer-Olkin (KMO) criterion and therefore the interest is only on factors with eigenvalue of 1 and above.

The EFA analysis for IE yielded four factors with eigenvalue of 1 and above (5.030, 1.414, 1.335 and 1.052), the four factors accounts for the 63.076% of the variance.

**Firm Performance**

The Kaiser-Meyer-Olkin (KMO) measure of sampling Adequacy and the Bartlett’s Test of Sphericity were applied to determine the compatibility of the factors. The KMO value for the Firm Performance (FP) was at .850 and adequate, as the value that is .6 and above is regarded as adequate (Pallant, 2007: 190). The Bartlett’s Test of Sphericity is significant (p = 0.000) which is less than .5 therefore the scale is acceptable for factor analysis. The Kaiser-Meyer-Olkin (KMO) criterion and therefore the interest is only on factors with eigenvalue of 1 and above.

The EFA analysis for FP, resulted in two factors with eigenvalue of 1 and above (3.898 and 1.076), the two factors accounts for the 71.051% of the variance.

**Pearson Product-Moment Coefficient Correlation Results**

Pallant, (2007: 126) explains that correlation coefficients (r) can be explained with values from -1(negative perfect correlation) to +1 (positive perfect relationship and that the correlation value of 0 depicts that there is no relationship between the two variables. The criterion score for Pearson correlation span from weak (r = 0.10 to 0.29), moderate (r = 0.30 to 0.49) and strong (r = 0.50 to 0.1) (Pallant, 2007: 126). The below table presents the Pearson Product Coefficient Correlation scores between constructs External Environment (EE), Internal Environment (IE) and Firm Performance.
H3: There is a relationship between IE (independent variable) and FP (dependent variable).

As per the above table, the IE score shows a significant, strong positive correlation with FP (N=394; r = .572; p = .000). Therefore, an increase in the IE score will result in an increase in the FP score. In addition, the correlation results between IE and EE are as follows taking into consideration that Factor Analysis (FA) on EE extracted two factors and the results as per table 37 point out that EE factor 1 (Business Acumen) score shows a significant, moderate positive correlation with IE (N=397; r = .489; p = .000) whilst EE factor 2 (Macro Environment) indicates a weak positive correlation with IE (N=396; r = .108; p = 0.031). Therefore, an increase in the EE Factor 1 (business acumen) score might moderately increase in the IE score.

H5: There is a relationship between EE (independent variable) and FP (dependent variable).
Figure 3. The results of the correlation of the EE, IE and FP constructs

Factor Analysis on EE extracted two factors and the results as per table 37 reveal that EE factor 1 (Business Acumen) score shows a significant, strong positive correlation with FP (N=394; r = .538; p = .000) whilst EE factor 2 (Macro Environment) indicates a weak positive correlation with FP (N=396; r = .138; p = 0.006). Therefore, an increase in the EE Factor 1 (business acumen) score will result in an increase in the FP score.

DISCUSSION AND CONCLUSION

Firm Performance: The growth and sustainability of any firm can be determined by its success which can be attributed to its performance (Al-Matari et al., 2014: 25). Firm performance is important for both big and small organisations in that it ensures creation of sustainable jobs, eradication of poverty and economic growth for countries therefore it is important that factors that influence growth of businesses is studied (Okeyo et al., 2014: 14). Soriano (2010: 468) identified entrepreneurial orientation, creativity, innovation, price and product differentiation, ability to collaborate with other firms and ability to access private sector funding as some of the core strategies that firms should employ in order to realise improved sustainable performance.

Literature Findings on IE

Fatoki (2014: 926) explains the firm’s internal environment as part of the business that is within the span of control of management and can be modelled to grow and sustain the business performance. Additionally, Pearce and Robinson (2013: 164), stresses the importance of the firm’s internal environment by explaining that in order for companies to achieve their set objectives they need to analyse their internal capabilities through either value chain analysis, functional analysis or Strength, Weakness, Opportunities and Threats (SWOT). Venter (2014: 117) also discussed the five elements that influences a firm’s performance from internal environment perspective as financial capital, physical capital, human capital, organisational capital and technological capital.

EE: The firm’s external environment should be managed, studied and observed carefully because of its complex, dynamic and constantly changing nature has the ability to impact on the competitiveness of the firm (Venter, 2014: 139). Hough et al. (2011: 57) further added that the firms’ “macro environment” comprises of all factors that are outside the control of the firm and affects its operations. Venter (2014: 140-141); Pearce and Robinson (2013: 84); Hough et al. (2011: 57) also stressed the complexity and dynamic nature of the external environment as being made up of socio cultural, technological, legal, regulations, global, political, ecological and economic factors. Also that not all firms have that ability to control them but only to develop strategies to counteract them. There has been some extensive studies conducted on the impact of external environment on firm performance in the recent years however, Indris and Primiana (2015: 193) along with to Adeola (2016: 165) for example found that for businesses to be sustainable they need to fully learn and understand the nature of the challenges posed by the external
environment on their businesses. Comparably, Kraja and Osmani (2015: 128) carried out a study on a sample of 436 SMEs in the Northern Region of Albania and it revealed that the dynamic nature of the external environment requires of managers to make variable resolution on firm continuity.

The findings of this study revealed that Factor Analysis on EE extracted two factors and factor 1 (Business Acumen) score shows a significant, strong positive correlation with FP (N=394; r = .538; p = .000) whilst EE factor 2 (Macro Environment) indicates a weak positive correlation with FP (N=396; r = .138; p = 0.006). Therefore, an increase in the EE Factor 1 (business acumen) score will result in an increase in the FP score. The afore-mentioned findings support the findings by the previous authors. The relationship between IE and FP: Smit and Bruwer (2014: 31) established that businesses should ensure a strict oversight on micro economic factors of a business because they have a tendency of affecting the operations negatively, the notion is supported by a majority of researchers who reconcile that a firm’s internal environment can be controlled and managed in order to ensure conducive operational environment that will yield competitive advantage and positive results (Hough et al., 2011: 112-113; Kuratko, Hornsby & Covin, 2014: 38-39; Kraja & Osmani, 2015: 123). Innovation has been found to be one of the skills that are needed for entrepreneurs and therefore the firm’s operational environment should be structured in a way that it supports employee innovation (Kreiser & Davis, 2010: 48- 49). In addition, Urban and Naikoo (2012: 157 –158) established that internal operating environment is important for firm performance and therefore SMME’s should be trained on all facets of operations management including the functional skills, cultural diversity, human resources management and financial management to enhance their skills and competency for responding to the challenges faced by businesses from their competitors and ever revolving operational environment.

The findings of this study established that the IE score shows a significant, strong positive correlation with FP (N=394; r = .572; p = .000). Therefore, an increase in the IE score will result in an increase in the FP score. Therefore, in line with the above authors, this study found that there is a relationship between the firm’s internal environment and firm performance. The relationship between IE, EE and FP: Firm performance is found to be influenced by a combination of market access, infrastructure facilities and procurement services (Okeyo et al., 2014: 21-22). The notion of multiple factors that influences firm performance is also supported by Moorthy et al. (2012: 234) conclusion in their study of factors affecting performance of SMEs in Malaysia which stipulated that appropriate Human Resource Management, effective entrepreneurship, utilisation of marketing information and implementation of information technology has a notable impact on firm performance. The results of the study revealed that both EE factor 1(r= .538 and p=0.000) and IE (r=.489 and p=0.000) have a significant strong relationship with FP. It can then be concluded that the results of this study support the findings of the above authors.

Firm Demographics: The study conducted by Vallabh and Mhlanga (2013: 8) of 322 small to medium enterprises in the tourism sector in South Africa, found that there is a positive relationship between gender and firm performance. Despite the fact that (Smith et al., 2006; Darmadi, 2013: 22; Marinova et al., 2016: 15) found that there is no relationship between gender and performance of firms; Hoogendoorn et al. (2013: 23) established working teams which consists of mixed genders performs better whilst Lee and Marvel (2014: 782) advocates for their finding that male dominated firms performs better in technology and manufacturing related sectors compared to females. Majority of the SMME respondents at 50.6% were above the age of 35, which is above the youth age. 92.7% of the SMME owners’ respondents were founders and 92.9% managers; the findings support the findings by Hewitt (2012: 194) that the hands-on approach of SMME owners and founders lead to higher entrepreneurial orientation. In addition, the majority of the SMME owners at 51.8% mentioned that their educational level is grade 12 and below which can somehow pose a problem for based of the findings by a research conducted by Steenkamp and Bhorat (2016: 28) which concluded that education and skills are pivotal in improving the performance of the enterprise as well as can improve the SMME owners savvy in making good judgements and access to markets. In addition, the majority of the SMME owners at 51.8% mentioned that their educational level is grade 12 and below which can somehow pose a problem for based of the findings by a research conducted by Steenkamp and Bhorat (2016: 28) which concluded that education and skills are pivotal in improving the performance of the enterprise as well as can improve the SMME owners savvy in making good judgements and access to markets.

Study Contributions

The study established a significant contribution to the impact of the external and the internal factors on firm performance. It further determined that the extent to which different external factors affects the firm performance differs especially amongst the SMMEs, but it still needs further studying and analysis. The study will assist the SMME’s in the different sectors to understand the impact of the external and internal environment of their firm’s performance. In addition, the Developmental Finance Institutions will also benefit by ensuring that the training
that they offer to SMMEs focus on developing appropriate strategies that will counteract the negative impact of the external and internal environments on performance.

LIMITATIONS OF THE STUDY

The study was limited to SMMEs within the Gauteng Province and only those that received financial and or non-financial assistance from the GEP, it would be beneficial if the sample can be extended to other DFIs within Gauteng and as well to at least additional two provinces within South Africa.

AREAS FOR FUTURE RESEARCH

The areas for future research for this study is to widen the scope to other provinces and other DFIs. In addition, the if the target sample population for the study can be the SMMEs that have a turnover of more than 1.5 million Rands and a quantitative research methodology to be used in collecting data. The analysis of the understanding of the impact of Entrepreneurial Orientation of firm performance should also be studied on the same sample as the data is already collected.

REFERENCES

48. Wingwon, B. (2012). Effects of entrepreneurship, organization capability, strategic decision making and innovation toward the competitive advantage of SMEs enterprises. *Journal of Management and
case Studies*.
AN EVALUATION OF THE CURRENT STATE OF SPORT TOURISM OFFER IN CROATIAN COASTAL DESTINATIONS
Slobodan Ivanović1, Ace Mitenkovski2 and Vedran Milojica3

Abstract:
Sport tourism registers a significant growth in tourism flows which is witnessed by the growth of tourists who choose to visit a certain tourist destination in order to participate in a sport event as an active or passive participant, tourists who visit destinations to celebrate sports by visiting its attractions, or tourists who choose to participate in sports activities during their holiday. Participating in these sport activities may or may not represent the main motive of their visit to a destination. Through development of successful and competitive sport tourism offer destinations are able to achieve significant economic advantages as well as provide their visitors to satisfy their needs for sports activities that were denied to them due to the stressful and demanding way of life caused by family, business and other types of commitments. Through positive experiences during their stay in a destination as well as satisfying their needs for sports activity, there is a higher chance that visitors will decide to re-visit the destination in the future. Republic of Croatia has over the years initiated activities in developing this specific form of tourism, but for the time being sport tourism hasn’t reached its full potential, which is visible from the current Strategy of tourism development of the Republic of Croatia until 2020 according to which sport tourism belongs in the group of tourist products with an exceptional perspective of development. Within this paper the authors will present the positive experiences of international destinations in developing sport tourism offer, as well as present the state of Croatian sport tourism offer, with a particular accent on the profile of tourists who choose to participate in sport activities during their stay in Croatian coastal destinations. The main accent will be given towards determining how motivated are visitors to participate in sports activities during their stay, which sports activities do they prefer during their stay, and how satisfied are they with the current offer of sports activities in the destination. The results will provide a basis for rethinking the directions of future sports tourist offer development. Within this paper the authors will use the appropriate scientific and professional literature in sports tourism, as well as the empirical results obtained from secondary sources.

Keywords: sport tourism, sports tourist offer, Republic of Croatia

INTRODUCTION

The last couple of decades of the last, and the beginning of this century were, and still are, marked with significant changes in characteristics of tourist demand, all as a result of growth of additional funds, life standard, and growth of free time intended for a holiday and recreation, and tendency to return to nature and traditional values. Specific forms of tourism became an important element of contemporary tourist offer when it comes to satisfying specific needs and desires of tourists of various age groups and affinities (Alkier et al. 2015, p. 239), and one of them that is registering a high rate of growth on world level is Sports tourism. In the past sports activities as well as search for new adventures were a significant motive for travelling, which in the end resulted in development of Sports tourism, which today represents one of the most important reasons for undertaking a holiday. Although still popular, the traditional tourist offer which is usually marked as the 3S (Sun, Sea, Sand) is today insufficient due to the fact that tourists require activities which imply greater level of physical and intellectual involvement or satisfying personal interests. Risk and excitement in a new, unusual, and exciting surroundings became a desirable part of tourist experience. While sports is becoming a more and more dominant factor when choosing a holiday destination, sense of an experienced and happily finished adventure is for many tourists a pre-condition of a so called top experience and total satisfaction with the journey. Sports has a significant contribution in development of tourism in destinations not only in terms of economic effects, but also in the sense of urban regeneration, improvement of infrastructure, enrichment of tourist offer and strengthening of destination’s image (Rabotić, 2012, p. 155).

Many world destinations are working hard on developing a successful and competitive sports tourism offer in order to enable for their tourists a unique and top quality experience, while at the same time achieving socio-economic benefits and competitiveness on the tourist market. Republic of Croatia is a tourist destination with a long tradition which is investing efforts in developing its tourist offer and making it more attractive for tourists, as well as more competitive on the tourist market. Although it has recognized the potential of specific forms of tourism, and sports tourism in particular, it hasn’t been reaching its true potential. The purpose of this paper is to

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present the importance of sports tourism offer as a part of a competitive tourist offer of coastal destinations while emphasizing positive practices of international destinations, while the goal is to determine the state of tourist offer of sports tourism offer in Croatian coastal destinations, as well as the attitudes of tourists towards the offer. The findings will enable for authors to rethink the directions of future sports tourist offer development.

SPORTS IN TOURISM-THEORETICAL BACKGROUND

Connectivity of tourism and sports has been registered in the ancient time, but the democratization in the 20th century enabled for sports and tourism to become more accessible to a greater number of people. An increasing demand for undertaking a holiday motivated by participating in sports activities resulted in development of specific form of tourism called Sports Tourism and all of its forms (Ivanović et al., 2016, p. 147 according to Škorić, 2012, p. 138). Today recreation represents an important part of understanding the contemporary tourism. It encompasses numerous facilities that tourists choose according to their own preferences, needs and possibilities. Facilities and forms of recreation are registering changes and are being adapted to the cultural and social needs of contemporary tourists. According to the needs of contemporary tourists, sport recreation is being emphasized in the last couple of decades as an important part of a tourist’s stay in a destination, as well as a motive for choosing a holiday destination. Active holiday became a synonym of a tourist holiday. Sports recreation facilities have a dominant role in satisfying the need for movement and adequate physical activities, which today is an imperative for good quality holiday. Developmental trend of contemporary sports tourism involves a large number of facilities which ensure an active holiday, but also the entertainment which provides satisfaction for a longer period of time. Sports and recreation in tourism have an important, compensating role, and that is satisfying primary needs of people for movement and activities, and in the natural surroundings. These needs are becoming more and more expressed along with the greater growth of technological development of the society. Sports recreation in tourism is more and more frequent factor of arrival to a certain destination, which implies the need for permanent research of desires and interests of tourists due to the harmonization of tourist offer and tourist demand (Andrijašević, 2007, p. 94-97). Bearing in mind the importance of Sports tourism and the necessity of its improvement and further development, many researches were made from various points of view, i.e. determining general characteristics of sports tourism (Gammon, 2015), determining the state of sports tourist offer in the destination (Yiannakis, 2009), implications of development of sports tourism offer on a tourist destination (Kartakoulis and Karlis, 2002, Thanh, 2017), which socio-demographic characteristics affect sport tourism choices (Valek et a. 2014), determining the service quality and behavioral intentions of tourists (Romiti and Sarti, 2016; Kouthouris & Alexandris, 2005), satisfaction with the sports tourism offer (Moital et al. 2013; Ramirez-Hurtado and Paralera-Morales, 2014), examining the motives of tourists in participating in sports tourism activities (Demirović et al., 2019; Hamdan and Yusof, 2014; Tomik et al., 2014; Ramirez-Hurtado and Paralera-Morales, 2014; Aicher et. al., 2015), what are the factors that influence the sport tourists' revisit intention and loyalty (Allameh et al., 2015; Abdali et al., 2014), developing business models intended for sport tourism (Perić et al., 2019; Perić et al., 2019), economic contribution of sports tourism (Drakakis and Papadaskalopoulos, 2015), economic impacts of sport tourism events (Duglio and Beltramo, 2017), etc.

A SHORT INSIGHT INTO THE INTERNATIONAL TRENDS IN SPORTS TOURISM

According to the most recent findings by the UNWTO (2019), a total of 1.4 billion of international tourist arrivals was registered on world level (+5% in relation to the previous year), as well as 1.7 billion of USD in total international tourism exports (which consist of international tourism receipts and passenger transport). When observing the regional results, it has been registered that in 2018 Europe continued to hold a leading position by participating in tourist arrivals with 710 million tourist arrivals (+5% in relation to previous year), followed by Asia and Pacific 348 million tourist arrivals (+7% in relation to previous year), Americas 216 million (+2% in relation to previous year), Africa 67 million (+7% in relation to previous year), and Middle East 60 million (+5% in relation to the previous year). Similar situation is with achieved international tourism receipts; in 2018 Europe achieved USD 570 billion (+5%), followed by Asia and Pacific (USD 435 billion, +7%), Americas (USD 334 billion, +0%), Middle East (USD 73 billion, +4%) and Africa (USD 38 billion, +2%). Bearing in mind the fact that world tourism is registering a strong and significant growth for the nineth year in the row, it can be justifiably expected that in the future years it will continue to do so.

Positive trend of growth of tourism indicators is a result of undertaken efforts of numerous world destinations who are working hard on daily basis to develop a competitive tourist offer which will be able to satisfy specific needs of contemporary tourists. As a result of that, throughout the years specific forms of tourism gained on importance considering that their offer enables satisfaction of needs of tourists of various profiles and tendencies. One of the specific forms of tourism which is registering strong growth is sports tourism.

According to the World Tourism Organization, Sport Tourism represents the fastest growing sector within the global world tourism flows. Numerous destinations and host locations can boast of possessing suitable
infrastructure, from sports facilities, diverse sports activities through to the accommodation stock to capitalize on this global opportunity. However, those destinations that possess the spirit of an inner sport tourism entrepreneur will be able to achieve success on the tourist market through formation and offering of programs of events and activities which will be able to deliver long-term and sustainable economic, social, promotional and other advantages for a host-destination (WTM Global Hub, 2015). In today’s tourism flows, the very first association which comes to mind when Sports tourism is mentioned is being able to have sport experiences away from home and work stress and obligations, as well as a to experience unique interaction of activities and people in the destination, and the destination itself. In the global tourism industry, today sports tourism represents one of the fastest growing sectors and is becoming increasingly popular among tourist destinations on daily basis. Today the world is witnessing an increasing transition from the tradition sun and sea holidays to the holidays that are sports related. Sports tourists can be divided into three categories: the participatory sport tourists ones (who visit a destination to participate in the sports activities), event-based sport tourists (who visit a destination to participate actively of passively in a sport event) and celebratory sport tourists (who visit various halls of fame, stadiums, museums and similar places of attraction) (Beyond Summits, n.d.; Parker, 2019).

Destinations all around the world have recognized the potential and advantages of development of this specific form of tourism and are developing it. Following the authors will briefly present some positive trends:

- Spain (Eurasia Review News and Analysis, 2019): sports-related statistical indicators published by the Spanish Ministry of culture and sport indicate that Sports tourism became one of the economic drivers by managing to generate 2.44 billion of Euros in 2018, respectively a 10% increase in relation to the previous year. In terms of tourist consumption, it has been registered that tourist residents in Spain spent 1.03 billion of euros on sport-related journeys, which is an increase in comparison with 957 million that was registered in 2017. Sports tourists from abroad spent 1.41 billion euros, compared with 1.26 billion the previous year. When observing the motive for undertaking a journey, 4.1% of all journeys made for leisure, recreational or holiday purposes by residents in Spain were motivated by sport. Out of 1.5 million of foreign tourist arrivals, 2% were sports motivated. One of many Spanish destinations that is registering the development is Catalonia;
- Dubai (Deloitte, 2015; Mack, 2019): here tourism forms the core of economic growth and diversification on the tourist market. Throughout the years significant funds were invested in development of infrastructure, attractions and services, with a goal of preserving loyal and attracting new tourists, and satisfying their needs. A set vision for the year 2020 is to attract 20 million of tourists annually and generate 82 billion of American Dollars in annual tourism revenues by 2020, in which Sport tourism is expected to be of key importance. Some of the sports activities that are well developed in Dubai are golf tourism, racket sports, cricket, water and winter sports, and organization of sports events. Their opportunities for future development manifest in further development and organization of sports events, Expo 2020 Dubai, improving present and developing new sports facilities, attracting domestic and foreign visitors, and developing Dubai a sports hub.

PRESENTATION OF CROATIAN (SPORTS) TOURIST OFFER

According to the current Strategy of Development of Croatian Tourism until 2020 (2013, p. 8-27), development of tourist activities based on sports belong to the group of products with an expressed developmental perspective. The Strategy emphasizes that in terms of Adventure and Sports tourism, there is a range of a more and more significant and fast growing group of products for which some of the operators report growth of up to 30 per cent per annum, which includes snorkeling, kayaking and canoeing, rafting, adrenaline sports, hunting, fishing, as well as winter sports and sports preparations. Furthermore, the strategy emphasizes that despite the fact that in hillside and coastal part of Croatia, a wide offer of niche adventurous/sports programs is registering a strong growth, Croatia is still insufficiently using its comparative advantages for development of this form of tourist product. When discussing Cyclotourism as a part of a contemporary tourist offer, it has been estimated on Europe level that the share of journeys during which cycling is the main activity or bicycle of the main mean of transport will grow in the next ten years for more than ten percentage points. Even more significant market segment is of those for whom cycling represents an important additional activity during their holiday. Even though Croatia possesses a relatively good network of local and county cycling trails of which some are international cycling routes, the product is still not properly valorized nor commercialized. Another element of contemporary sports tourism offer that became globally popular. Due to the insufficient number of golf courses Croatia is currently non-existent on the map of tourist golf offer despite the fact that golf is today, and it is justifiably expected to continue to be in the future, one of the most significant markets of Mediterranean tourist demand, in particular in the periods off season. In the future it is expected that cyclotourism and adventurous-sports tourism will continue to register fast growth. This trend is supported by more expressed needs of tourist for active, healthy, and environmentally sustainable holiday. Accordingly, with the values and interests of contemporary tourists, further diversification of products is
being expected, as well as the development of combined products which connect adventurous-sports tourism with other specific forms of tourism (gastronomic, cultural) etc. Growth is expected in the adrenaline sports. Over the years Republic of Croatia achieved a high level of recognizability on world level, and in particular after becoming a European Union member. In order for Croatia to survive on the tourist market, adaptation to the current tourist offer elements and development of new ones is a must, especially those based on specific forms of tourism. Despite Croatian tourist product still mostly being based on traditional bathing tourism offer, improvements were made through development of specific forms of tourism, (Alkier et al., 2015; Alkier et al., 2018) one of them being Sports tourism. When observing previously presented numerous advantages of development of Sport tourism achieved by international destinations, it is important to consider where Croatia stands, respectively which is the current level of its development. It is a well known fact the majority of its tourist turnover is registered in the summer period and in coastal destinations, so in this paper the authors will focus on determining the state of sports tourism offer in them by using appropriate qualitative and quantitative indicators, and based on the findings propose potential developmental guidelines.

Table 1. Achieved tourist arrivals and overnights of tourists in the Republic of Croatia in the period 2014-2019

<table>
<thead>
<tr>
<th>Achieved arrivals</th>
<th>Achieved overnights</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>2016</td>
<td>15.463.160</td>
</tr>
<tr>
<td>2017</td>
<td>17.430.580</td>
</tr>
<tr>
<td>2018</td>
<td>18.666.580</td>
</tr>
<tr>
<td>2019</td>
<td>19.566.146</td>
</tr>
<tr>
<td>2019/2014</td>
<td>+49,04%</td>
</tr>
</tbody>
</table>


The data in the previous table indicate a continuous five-year growth of both tourist arrivals and overnights. Total tourist arrivals achieved a 49.04% increase, and total tourist overnights a 37.24% increase.

The following tables represent the attitudes of tourists towards sports tourism offer in Croatian coastal destinations (the level of sport tourism being the motive for visiting Croatian coastal destinations, which activities did tourists preferred to practice during their stay, the level of satisfaction with the elements of sport tourism offer, as well as their consumption on sports activities). The findings were determined as a part of the latest study TOMAS Summer Attitudes and Consumption 2017 of tourists conducted by the Institute of Tourism in Zagreb. The latest results were compared with the research results from 2014 in order to determine positive or negative movements.

Table 2. Sport as a motive of arrival (%)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Sports and recreation</td>
<td>6.8</td>
<td>19.8</td>
<td>+13.0</td>
</tr>
<tr>
<td>Snorkeling</td>
<td>3.2</td>
<td>6.1</td>
<td>+2.9</td>
</tr>
</tbody>
</table>

Source: TOMAS Summer Attitudes and Consumption in Croatia (2015, 36; 2018, p. 31-32)

The data in the previous table indicate a growing interest of tourists for visiting Croatian coastal destinations for sports and recreation activities (+13%), as well as for snorkeling and exploring the underwater beauties of the Adriatic Sea (+2.9%).
Table 3. Sport activities during the visitor’s stay in a destination (%)

<table>
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<tr>
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<tbody>
<tr>
<td>Swimming and bathing</td>
<td>98.9</td>
<td>78.3</td>
<td>-20.6</td>
</tr>
<tr>
<td>Walks in nature (hiking)</td>
<td>78.3</td>
<td>15.9</td>
<td>-62.4</td>
</tr>
<tr>
<td>Jogging</td>
<td>-</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Snorkeling</td>
<td>37.0</td>
<td>16.3</td>
<td>-20.7</td>
</tr>
<tr>
<td>Water sports (sailing, surfing, water skiing)</td>
<td>33.9</td>
<td>16.0</td>
<td>-17.9</td>
</tr>
<tr>
<td>Cycling</td>
<td>33.2</td>
<td>12.6</td>
<td>-20.6</td>
</tr>
<tr>
<td>Fishing</td>
<td>21.4</td>
<td>7.7</td>
<td>-13.7</td>
</tr>
<tr>
<td>Tennis</td>
<td>21.1</td>
<td>9.9</td>
<td>-11.2</td>
</tr>
<tr>
<td>Adventure sports</td>
<td>14.3</td>
<td>11.1</td>
<td>-3.2</td>
</tr>
<tr>
<td>Mountaineering</td>
<td>12.6</td>
<td>3.9</td>
<td>-8.7</td>
</tr>
<tr>
<td>Golf</td>
<td>8.0</td>
<td>2.2</td>
<td>-5.8</td>
</tr>
<tr>
<td>Horseback riding</td>
<td>6.8</td>
<td>3.5</td>
<td>-3.3</td>
</tr>
</tbody>
</table>

Source: TOMAS Summer Attitudes and Consumption in Croatia (2015, 46; 2018, p. 41)

Table 4. Satisfaction with the elements of sport tourist offer in Croatian coastal destinations

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Walking paths</td>
<td>-</td>
<td>Medium</td>
<td>-</td>
</tr>
<tr>
<td>Richness of sports facilities</td>
<td>Medium</td>
<td>Low</td>
<td>Decrease</td>
</tr>
<tr>
<td>Cycling paths</td>
<td>-</td>
<td>Low</td>
<td>-</td>
</tr>
</tbody>
</table>


Results for both practiced sports activities as well as satisfaction with the sports tourism offer are accompanying each other and are very dissatisfying. All offered sports activities are registering a significant decrease of interest of tourists, first being interest in walks in nature, followed by snorkeling, swimming, and bathing, cycling etc. The authors were not able to compare the satisfaction results for all three elements due to the change in the questionnaire used. However, a decrease of satisfaction was registered in richness of sports facilities, and quality of cycling paths was marked poorly, with a low level of satisfaction, while satisfaction with walking paths was marked with medium level of satisfaction.

Table 5. Tourist’s consumption on sport tourism offer in Croatian coastal destinations (EURO)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total daily consumption</td>
<td>66.36</td>
<td>78.77</td>
<td>+12.41</td>
</tr>
<tr>
<td>Sports activities</td>
<td>1.83</td>
<td>3.05</td>
<td>+1.22</td>
</tr>
</tbody>
</table>


According to the indicators from the previous table, it is visible that total daily consumption is registering growth (+12.41 euro in 2017 in comparison to the year 2014). However, tourists spend incredibly small amounts of their funds on sports activities.

The results presented within this chapter point on significant lacks in terms of quantity, diversity and quality of sports facilities as a part of tourist offer in Croatian coastal destinations. It is quite clear that at this point tourist’s needs and desires are not met in any way, which will, if serious corrections are not made, will have significant negative implications on Croatian tourism in general and its competitive positioning on the tourist market. Following some developmental guidelines will be proposed with a goal of improving the sports tourist offer.

**PROPOSAL OF ACTIVITIES FOR DEVELOPMENT OF SPORT TOURISM OFFER OF CROATIAN COASTAL DESTINATONS**

According to the research results presented in the previous chapter the authors propose the following activities of development of sport tourism offer (adaptation according to the Ministry of Tourism, 2013, p. 45):
significant improvements need to be made within current offer in terms of increasing the diversity, quality and quantity, while at the same time introducing new elements of tourist offer according to the newest trends and positive examples of practice in competing destinations;
- improvement of infrastructure necessary for provision of sport tourism services;
- further improvement and development of accommodation capacities with a high level of sense for local place, the atmosphere, pleasantness, and environmental responsibility;
- further development of local products including gastronomy;
- education of employees
- cooperation of offer carriers of sport tourism and ministries in charge with a goal of obtaining financial and institutional support
- organization of additional facilities for users of sport tourism offer (same-day trips, spa & wellness, entertainment facilities, etc.)
- organization of preparations for athletes.
- establishment of professionally guided association of sport tourism with various sections which would be in charge for exploring the market, informing about the findings, education, lobbying, connecting, establishing partnerships with sports societies, memberships in international organizations;
- obtaining additional funds through EU projects for building, renovation and improvement of sport (tourism) infrastructure
- profiling of top destinations (i.e. snorkeling, kayaking/canoeing) with the offer that is adjusted to a specific consumer segment;
- development of competitions and manifestations (with a particular accent on those of international character);
- establishing a system of minimum standards (i.e. equipment, safety, environment responsibility).
- promotion of Croatia as a destination which possesses a developed offer of sport tourism (use of information technology in promotion).

CONCLUSION

Republic of Croatia is a tourist destination that has been recognized all over the world for its natural, cultural-historical and many other values, which enabled her to develop a good quality tourist offer which is not only based on sun and sea offer, but also specific forms of tourism for which the demand is on the rise on daily basis. Sport tourism hasn’t reached the appropriate level of development despite its potential, and it is not making its contribution in the way it could and should be. Croatia has a high potential for developing and becoming a well-known sport tourism destination all over the world. Successful development of sport tourism offer would result in numerous advantages both for tourists (satisfying their specific needs for sports activities, health improvement, socialization, etc.) and for the destination-host (increase of tourist turnover (arrivals, overnights, consumption), attracting new tourists and stimulating the ones that already stayed in Croatia to re-visit and recommend it, preserving the domestic tourists, etc.). In order to be able to achieve further success, Croatia most definitely needs to track contemporary trends on the tourist market and good practices of the competitive destinations, and try its best to apply them in order to achieve success in the future and position itself as a competitive sport tourism destination on the tourist market.

REFERENCES


- 90 -
ENTREPRENEURIAL ACTIVITY – A MATTER OF MICROECONOMIC CONDITIONS OR MACROECONOMIC FREEDOMS?
Jani Kinnunen \(^1\) and Irina Georgescu \(^2\)

Abstract:
In this paper, the implications of economic freedoms and entrepreneurial conditions for the level of early-stage entrepreneurial activity are under study. The purpose is to rank-order microeconomic entrepreneurial conditions and (macro)economic freedoms under which companies are established, i.e., to find the most important factors affecting entrepreneurial activity. The used data on entrepreneurial conditions is acquired from Global Entrepreneurship Monitor (GEM) and the data on economic freedoms from the Heritage Foundation. Both micro and macro perspectives are featured by 12 factors constructing an index making up the total of 24 individual predictors plus 2 indices. The target variable is the early-stage entrepreneurial activity from GEM, which is categorised into three categories of low, medium, and top level of entrepreneurial activity. The used methods to process the data and to analyse the predictive power are a multilayer artificial neural network, ANN, supported by a multiple correspondence analysis, MCA. Firstly, the MCA is used for descriptive purposes by plotting the most important factors with countries related to them. Secondly, the ANN will be optimised for the best possible network performance i) to demonstrate the effectiveness of neural networks by showing the model performance for each category of entrepreneurial activity and ii) to reveal and order the most important factors needed to achieve a high prediction accuracy of the model. The results from MCA and ANN are combined and their implications are discussed. Finally, some potential future research steps are suggested.

INTRODUCTION

This paper addresses the implications of economic freedoms and entrepreneurial conditions for the early-stage level of entrepreneurship. The dataset consists of 49 countries analysed from micro and macro perspectives with help of 27 variables, among which the class variable is the early-stage entrepreneurial activity. This class variable has three categories, according to the division of its values in three intervals, determined by the 25\(^{th}\) and the 75\(^{th}\) percentiles. Verheul et al. (2002) gives several definitions and measurements of entrepreneurship including business ownership and self-employment. Business ownership refers to small and medium companies or, in a dynamic perspective, start-up activities. On the other hand, self-employment means a business owner and not a job-seeking person. Further, the same paper develops a discussion of the determinants of entrepreneurship at the micro, meso and macro level. At the micro level the main determinants of entrepreneurship are motivational and psychologic, at the meso level, they are market-specific, such as profit opportunities; the macro level aggregates the micro and meso levels, referring to cultural, technological and economic factors.

In this study, we use total entrepreneurial activity (TEA) as the target variable, which is a measure of the age 18-64 population, who are either a nascent entrepreneur or owner-manager of a new business (cf. Bosma et al., 2020). Bjørnskov and Foss, (2008) discuss theories of entrepreneurship and its determinants focusing on the relation between economic freedom and entrepreneurship measured by TEA. The empirical part of the paper contains a statistical analysis of a large-scale questionnaire, conducted in 29 countries and having 77000 respondents. They find that the size of government is strongly positively correlated with TEA, while GDP was negatively correlated with TEA. The lack of taxation was found positively impacting the entrepreneurship opportunities. Hall et al. (2013) found that economic freedom has a positive influence on entrepreneurship by increasing economic freedom, the climate for new businesses is encouraged. There is strong evidence of the positive relationship of economic freedoms and economic activity measured by GDP (cf. Gwartnery et al., 2019; Miller et al., 2020; Georgescu et al., 2018).

Several other drivers of entrepreneurial activity have been found in the literature. Nyström (2008) contains an empirical study in which the fixed effects model is chosen, when total self-employment is statistically significant influenced by size of government, legal structure, property rights and regulation of labour, business and credit. Kreft and Sobel (2005) study the Granger causality of capital venture and entrepreneurial activity and reach the conclusion that VC Granger causes entrepreneurial activity for 50 US states. Mandic et al. (2017) discusses how the institutional framework of 11 capitalist countries which belonged to EU before the 2004 expansion influenced the entrepreneurial activity. In their model, TEA is taken as dependent variable, while the explanatory variables are GDP per capita, GDP per capita rate, economic freedom index and age dependency ratio. They found strong positive and statistically significant impact of economic freedom to TEA in line with Hall et al. (2013).

The paper is structured as follows. Section 2 describes the dataset and the way the 49 countries are classified in the top, medium and low entrepreneurial activity. Section 3 is dedicated to the applied methods; in section 3.1 the

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multiple correspondence analysis is applied to categorised data. It was noticed that by applying principal component analysis, the first two components explain 31.7% of the total variance, which is dominated by the variables Entrepreneurial condition index, R&D transfer, Financing for entrepreneurs, Governmental programmes, Governmental support and policies, Internal market openness, Freedom index and Rule of law. In section 3.2 neural networks are applied to classify the countries into total entrepreneurial activity (TEA) categories, achieving an accuracy of 97.3% for the train set, respectively 83.3% for the test set. It will be noticed that property rights are the most important variable in classification followed by fiscal health, cultural and social norms, investment freedom and labour freedom. Discussion with future research suggestions conclude the paper.

**DATA DESCRIPTION**

In total, twenty-seven variables will be analysed. The dependent target variable is Early-stage total entrepreneurial activity (TEA) denoted as variable 0 (V0) in Table 1. Global Entrepreneur Monitor (GEM) defines TEA as the percentage of 18-64 years old population, who are either a nascent entrepreneur or owner-manager of a new business (cf. sources in Table 1). GEM provides twelve individual variables on entrepreneurial conditions, V2-V13, and an index constructed on them, V1, seen on the left column of Table 1. V1-V13 characterise the micro perspective in this study; the macro perspective, on the other hand is featured by Economic freedoms obtained from the Heritage foundation, HF (right column of Table 1). V14 is the Economic Freedom Index and its underlying variables V15-V26 can be divided into Rule of law (V15-V17), Government size (V18-V20), Regulatory efficiency (V21-V23), and Market openness (V24-V26) as classified by HF.

<table>
<thead>
<tr>
<th>Target variable</th>
<th>V0 - Early-stage entrepreneurial activity (TEA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurial conditions</strong></td>
<td><strong>Economic freedoms</strong></td>
</tr>
<tr>
<td>V1 - Entrepreneurial conditions Index</td>
<td>V14 - Freedom index</td>
</tr>
<tr>
<td>V2 - Financing for entrepreneurs</td>
<td>V15 - Property rights</td>
</tr>
<tr>
<td>V3 - Governmental support and policies</td>
<td>V16 - Judicial effectiveness</td>
</tr>
<tr>
<td>V4 - Taxes and bureaucracy</td>
<td>V17 - Government integrity</td>
</tr>
<tr>
<td>V5 - Governmental programs</td>
<td>V18 - Tax burden</td>
</tr>
<tr>
<td>V6 - Basic school entrepreneurial education</td>
<td>V19 - Government spending</td>
</tr>
<tr>
<td>V7 - Post school entrepreneurial education</td>
<td>V20 - Fiscal health</td>
</tr>
<tr>
<td>V8 - R&amp;D transfer</td>
<td>V21 - Business freedom</td>
</tr>
<tr>
<td>V9 - Commercial &amp; professional infrastructure</td>
<td>V22 - Labor freedom</td>
</tr>
<tr>
<td>V10 - Internal market dynamics</td>
<td>V23 - Monetary freedom</td>
</tr>
<tr>
<td>V11 - Internal market openness</td>
<td>V24 - Trade freedom</td>
</tr>
<tr>
<td>V12 - Physical and services infrastructure</td>
<td>V25 - Investment freedom</td>
</tr>
<tr>
<td>V13 - Cultural and social norms</td>
<td>V26 - Financial Freedom</td>
</tr>
</tbody>
</table>


Forty-nine (49) countries have available most-recent data for all the above 27 variables for year 2019. We divide all the variables into further 3 categories, i.e., *top, medium, and low categories*: a country falls into top category of each variable, if the value is larger or equal to 3rd quartile limit (75th percentile), medium category, when the value is between the 1st and 3rd quartile limits (25th – 75th percentiles), and into low category, when the value is less than the 25th percentile limit.

Table 2 shows the top-12 countries ordered by total entrepreneurial activity (TEA-V0): the top-6 countries are Latin American countries Chile, Ecuador, Guatemala, Brazil, Panama, and Colombia. The only European countries in top-TEA category are Armenia (7th) and Latvia (12th). Canada and the United States are 9th and 10th most-active entrepreneurial countries, respectively. Madagascar (8th) and United Arab Emirates (11th) are the other countries in top-TEA category. Table 2 also shows the Economic freedom index (V14) and Entrepreneurial conditions index (V1) for these countries as they summarise our macro and micro perspectives. The averages for the three key variables are: TEA = 22.8%, Freedom index = 68.0, and Entrepreneurial conditions index = 2.8.
Table 2. Countries in the top entrepreneurial category

<table>
<thead>
<tr>
<th>Country</th>
<th>TEA (V0)</th>
<th>Freedom index (V14)</th>
<th>Entrepreneurial conditions index (V1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chile</td>
<td>36.7</td>
<td>76.8</td>
<td>2.8</td>
</tr>
<tr>
<td>2. Ecuador</td>
<td>36.2</td>
<td>51.3</td>
<td>2.6</td>
</tr>
<tr>
<td>3. Guatemala</td>
<td>25.1</td>
<td>64.0</td>
<td>2.4</td>
</tr>
<tr>
<td>4. Brazil</td>
<td>23.3</td>
<td>53.7</td>
<td>2.6</td>
</tr>
<tr>
<td>5. Panama</td>
<td>22.7</td>
<td>67.2</td>
<td>2.6</td>
</tr>
<tr>
<td>6. Colombia</td>
<td>22.3</td>
<td>69.2</td>
<td>2.7</td>
</tr>
<tr>
<td>7. Armenia</td>
<td>21.0</td>
<td>70.6</td>
<td>2.8</td>
</tr>
<tr>
<td>8. Madagascar</td>
<td>19.5</td>
<td>60.5</td>
<td>2.4</td>
</tr>
<tr>
<td>9. Canada</td>
<td>18.2</td>
<td>78.2</td>
<td>3.1</td>
</tr>
<tr>
<td>10. USA</td>
<td>17.4</td>
<td>76.6</td>
<td>3.1</td>
</tr>
<tr>
<td>11. UAE</td>
<td>16.4</td>
<td>76.2</td>
<td>3.4</td>
</tr>
<tr>
<td>12. Latvia</td>
<td>15.4</td>
<td>71.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Average</td>
<td>22.8</td>
<td>68.0</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Table 3 shows the same data and averages for 25 medium-TEA countries. The medium group is the largest and most diverse group. At this point, we only note that the average TEA = 11.2%, Freedom index = 69.3, and Entrepreneurial conditions index = 2.9. Interestingly, the TEA is only half of the top-TEA category, but both Economic freedoms and Entrepreneurial conditions do not show significant differences to the top-TEA categories; they are, in fact, slightly higher.

Table 3. Countries in the medium entrepreneurial category

<table>
<thead>
<tr>
<th>Country</th>
<th>TEA (V0)</th>
<th>Freedom index (V14)</th>
<th>Entrepreneurial conditions index (V1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. India</td>
<td>15.0</td>
<td>56.5</td>
<td>3.4</td>
</tr>
<tr>
<td>14. South Korea</td>
<td>14.9</td>
<td>74.0</td>
<td>3.1</td>
</tr>
<tr>
<td>15. Qatar</td>
<td>14.7</td>
<td>72.3</td>
<td>3.4</td>
</tr>
<tr>
<td>16. Saudi Arabia</td>
<td>14.0</td>
<td>62.4</td>
<td>3.0</td>
</tr>
<tr>
<td>17. Slovakia</td>
<td>13.3</td>
<td>66.8</td>
<td>2.6</td>
</tr>
<tr>
<td>18. Mexico</td>
<td>13.0</td>
<td>66.0</td>
<td>2.9</td>
</tr>
<tr>
<td>19. Portugal</td>
<td>12.9</td>
<td>67.0</td>
<td>2.6</td>
</tr>
<tr>
<td>20. Israel</td>
<td>12.7</td>
<td>74.0</td>
<td>2.9</td>
</tr>
<tr>
<td>21. Ireland</td>
<td>12.4</td>
<td>80.9</td>
<td>2.9</td>
</tr>
<tr>
<td>22. Cyprus</td>
<td>12.2</td>
<td>70.1</td>
<td>2.8</td>
</tr>
<tr>
<td>23. Morocco</td>
<td>11.4</td>
<td>63.3</td>
<td>2.5</td>
</tr>
<tr>
<td>24. South Africa</td>
<td>10.8</td>
<td>58.8</td>
<td>2.4</td>
</tr>
<tr>
<td>25. Iran</td>
<td>10.7</td>
<td>49.2</td>
<td>2.1</td>
</tr>
<tr>
<td>26. Australia</td>
<td>10.5</td>
<td>82.6</td>
<td>2.9</td>
</tr>
<tr>
<td>27. Croatia</td>
<td>10.5</td>
<td>62.2</td>
<td>2.4</td>
</tr>
<tr>
<td>28. Netherlands</td>
<td>10.4</td>
<td>77.0</td>
<td>3.5</td>
</tr>
<tr>
<td>29. Luxembourg</td>
<td>10.2</td>
<td>75.8</td>
<td>3.1</td>
</tr>
<tr>
<td>30. Switzerland</td>
<td>9.8</td>
<td>82.0</td>
<td>3.5</td>
</tr>
<tr>
<td>31. UK</td>
<td>9.3</td>
<td>79.3</td>
<td>2.9</td>
</tr>
<tr>
<td>32. Russia</td>
<td>9.3</td>
<td>61.0</td>
<td>2.6</td>
</tr>
<tr>
<td>33. Jordan</td>
<td>9.1</td>
<td>66.0</td>
<td>3.1</td>
</tr>
<tr>
<td>34. China</td>
<td>8.7</td>
<td>59.5</td>
<td>3.4</td>
</tr>
<tr>
<td>35. Taiwan</td>
<td>8.4</td>
<td>77.1</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Table 3 shows the same data for the 12 low-TEA countries. Interestingly this category is dominated by European countries (7/12) and close Belarus, three Islamic countries, Oman, Egypt and Pakistan, and Japan. Italy is entrepreneurially the least active (49th) of the countries under analysis, while Mediterranean Greece (38th) and Spain (44th) are not doing much better, just alike Germany (40th) as of year 2019.

Table 4. Countries in the low entrepreneurial category

<table>
<thead>
<tr>
<th>Country</th>
<th>TEA (V0)</th>
<th>Freedom index (V14)</th>
<th>Entrepreneurial conditions index (V1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>38. Greece</td>
<td>8.2</td>
<td>59.9</td>
<td>2.6</td>
</tr>
<tr>
<td>39. Slovenia</td>
<td>7.8</td>
<td>67.8</td>
<td>2.8</td>
</tr>
<tr>
<td>40. Germany</td>
<td>7.6</td>
<td>73.5</td>
<td>3.0</td>
</tr>
<tr>
<td>41. Oman</td>
<td>6.9</td>
<td>63.6</td>
<td>2.8</td>
</tr>
<tr>
<td>42. Egypt</td>
<td>6.7</td>
<td>54.0</td>
<td>2.7</td>
</tr>
<tr>
<td>43. North Macedonia</td>
<td>6.2</td>
<td>69.5</td>
<td>2.5</td>
</tr>
<tr>
<td>44. Spain</td>
<td>6.2</td>
<td>66.9</td>
<td>3.2</td>
</tr>
<tr>
<td>45. Belarus</td>
<td>5.8</td>
<td>61.7</td>
<td>2.7</td>
</tr>
<tr>
<td>46. Poland</td>
<td>5.4</td>
<td>69.1</td>
<td>2.7</td>
</tr>
<tr>
<td>47. Japan</td>
<td>5.4</td>
<td>73.3</td>
<td>2.9</td>
</tr>
<tr>
<td>48. Pakistan</td>
<td>3.7</td>
<td>54.8</td>
<td>2.5</td>
</tr>
<tr>
<td>49. Italy</td>
<td>2.8</td>
<td>63.8</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>6.0</strong></td>
<td><strong>64.8</strong></td>
<td><strong>2.8</strong></td>
</tr>
</tbody>
</table>

The comparable averages for the low-TEA counties are: TEA = 6.0%, Freedom index = 64.8, and Entrepreneurial conditions index = 2.8. Total entrepreneurial activity is about half of the medium-TEA countries on average, Economic freedoms also show significantly lower average as the medium- and top-TEA group, but again Entrepreneurial conditions do not make a significant difference to other groups and is about the same as in the top-TEA group on average.

It is clearly seen that by looking at the index-level variables V1 and V14, and the group averages of the target V0, we are not able to draw any revealing conclusions on whether economic freedoms or entrepreneurial conditions work as drivers of entrepreneurial activity. We need to study the individual factors and whether countries are individually related to certain freedoms and conditions, which could further explain the early-stage entrepreneurial activity, TEA.

ANALYSIS

In this analysis part of the study, we will analyse qualitative data, i.e. the 27 variables categorised into top, medium, and low classes (as explained in the previous section), by multiple correspondence analysis in section 3.1. This will reveal which countries are related to which independent variables. We find the method most valuable for descriptive purposes, while the neural network analysis of section 3.2 is used to find the more complex connections of the numerical independent variables, V2-V13 and V15-V26, and the categorised target variable, TEA (V0).

Multiple Correspondence Analysis

Multiple correspondence analysis, MCA, using the R code provided by Kassambara (2017) is applied to categorised data (top, medium and low categories for each variable). The purpose is to get a high-level description of related factor classes and to imply, which factors play the greatest role in explaining the total variation in the dataset. MCA is a principal component approach applied to qualitative/categorical data in a similar way as principal component analysis, PCA, is to numerical data (cf. Tharwat, 2016; Kassambara, 2017).

The principal components are represented by dimensions so that the first and second ones (bars 1 and 2 in Figure 1; Dim1 and Dim2 in Figures 2 and 3) explain most of the variation of the data. Figure 1 shows that the first two
dimensions explain 31.7% (20.1% for Dim1 and 11.6% for Dim2) of the total variation. In MCA associations between variables are obtained by computing distances between the variable categories and between countries.

Figure 1. Total variance explained by each dimension in MCA

These associations are visualised firstly in Figure 2, which plots the squared correlations between variables, while the dimensions are used as coordinates (Dim1 on vertical axis and Dim2 on horizontal axis). The plot identifies the variables that are the most correlated with each dimension 1 and dimension 2. The squared correlations between variables and the dimensions are used as coordinates. It is seen that the variables Entrepreneurial condition index (V1) is the most correlated with both dimensions 1 and 2; similarly, also the other variables seen on the top-right corner, R&D transfer (V8), Governmental programmes (V5), Governmental support and policies (V3), Internal market openness (V11) and Freedom index (V14) are very highly correlated with both the two most important dimensions. On the right side, the variables are most correlated with dimension 1. These include, among the above mentioned, the Rule of law variables (V15-V17) (Property rights, V15, Judicial effectiveness, V16, and Government integrity, V17) as well, as Financing for entrepreneurs (V2). On the top of Figure 2, in addition to the top-right corner variables, Post-school entrepreneurial education (V7), Financial (V26) and Investment freedoms (V25) are the most correlated with dimension 2. These variables can be expected to coincide also in the neural network analysis of the subsequent section.

Figure 2. The most correlated/contributing factors of the first two dimensions

Figure 3 shows all the 49 countries and the top-third variable classes, i.e. 28 the most correlated classes out of the total 81 classes (27 variables times 3 classes each). The largest contributions, measured by correlation (cor2) with dimensions 1 and 2, are seen on red and the smallest contributions on blue. We may visually note two clusters showing up.

On the top-left quadrant, the largest contributions are shown by top-class of Basic entrepreneurial education (V6), top-class of Entrepreneurial conditions index (V1), top-class of Governmental support and policies (V3), Internal market openness (V11), top-class of R&D transfer (V8), top-class of Taxes and bureaucracy (V4) and top-class of Finance for entrepreneurs (V2). The countries close to these variables are related to these top-class variable categories. These countries include Switzerland (SWI), Netherlands (NET), Taiwan (TAI), Qatar (QAT) and
United Arab Emirates (UAE) together with a bit further down on the plot, Norway (NOR), Luxembourg (LUX) and the United States (USA).

On the top-right quadrant, the largest contributions are shown, specifically, by low-class of R&D transfer (V8), low-class of Entrepreneurial conditions index (V1), low-class of Property rights (V15), and in less extent the low-classes of Economic freedom index (V14), Trade freedom (V24), and Governmental integrity (V17), Investment freedom (V25). The countries related to these rather disastrous conditions include Ecuador (ECU), Iran (IRA), Russia (RUS), Pakistan (PAK), Madagascar (MAD), and South Africa (S-AFR).

Figure 3. MCA biplot of 49 countries and top-third contributing variable classes

Interestingly, the “top-cluster” of the top-left quadrant is clearly dominated by features of entrepreneurial conditions (micro perspective), while the “low-cluster” of the top-right quadrant also by Entrepreneurial conditions index and specifically R&D transfer, other factors with largest contributions are seen in economic freedom factors (macro perspective)

**Neural Network Analysis**

To neural network (NN) analysis is conducted using IBM SPSS v20 statistical software. The programme allows running the built-in multilayer perceptron (MLP) neural network. Neural networks have better predictive power than most of the other classification methods, e.g. Yim and Michell (2005) show NN beating logit models and discriminant analysis, Saboo et al. (2016) show the superiority of NN approach over linear regression models, and Anwar and Mikami (2011) show NN’s predictive ability over logistic regression and time-series, GARCH models. Our dataset of 49 countries was divided into the training set (75.5% of the cases) and the test set (24.5%) as seen in Table 5.

Table 5. Case processing summary

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>49</td>
<td>100.0%</td>
</tr>
<tr>
<td>Valid</td>
<td>49</td>
<td>100.0%</td>
</tr>
<tr>
<td>Training</td>
<td>37</td>
<td>75.5%</td>
</tr>
<tr>
<td>Testing</td>
<td>12</td>
<td>24.5%</td>
</tr>
</tbody>
</table>

To construct the neural network, we chose hyperbolic tangent as the hidden layer activation function and softmax as the activation function for the output layer. After several trials, we ended up using back-propagation based on scaled conjugated optimisation to obtain the weights through cross-entropy error minimisation, and the structure was of only one hidden layer with 4 neurons (plus the bias), as was suggested by automatic architecture, which proved more efficient as multilayer NN, as shown in Figure 4. As the activations of the output layer add up to one (1), the softmax layer is interpreted as a probability distribution with estimated probabilities for the classification by the inputs (Zacharis, 2016)

The target variable is total entrepreneurial activity (TEA, V0) as was noted in Table 1. TEA is categorised to the three classes of top, medium and low, as is seen in Figure 4. Similar categorisation was done to entrepreneurial conditions, V2-V13, and economic freedoms, V15-V26, which are set as the predictors in the NN of Figure 4.
Table 6 shows the areas under the ROC curves, when plotting the trade-off of sensitivity (true positive rate) and specificity (false positive rate). It is seen that even in top-TEA category the area is 0.953, which implies that the neural network performance is great in classifying countries into TEA categories.

<table>
<thead>
<tr>
<th>TEA_cat3</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEA_low</td>
<td>.995</td>
</tr>
<tr>
<td>TEA_med</td>
<td>.980</td>
</tr>
<tr>
<td>TEA_top</td>
<td>.953</td>
</tr>
</tbody>
</table>

The highly accurate performance of the NN is seen in the model summary of Table 7. The overall accuracy in the train set was as high as 97.3%, but as the NN achieved 83.3% accuracy also with the test set, the model seems to have been overfitted in the training.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Observed</th>
<th>Predicted</th>
<th>Percent Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEA_low</td>
<td>TEA_med</td>
<td>TEA_top</td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEA_low</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TEA_med</td>
<td>0</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>TEA_top</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Overall %</td>
<td>27.0%</td>
<td>51.4%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEA_low</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TEA_med</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>TEA_top</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Overall %</td>
<td>25.0%</td>
<td>50.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

The NN analysis is completed by obtaining the importance bar-plot of Figure 5. It is seen that property rights (V15) is / are the most important variable in the classification, i.e. it has the greatest effect on how the NN classifies the countries into top, medium and low categories. The other most-important factors, in this order, are Fiscal health (V20), Cultural and social norms (V13), Investment freedom (V25), Labor freedom (V22), R&D transfer (V8), Financing for entrepreneurs (V2), Governmental support and policies (V3), Business freedom (V21), and Internal market dynamics (V10).
To summarise, out of the top-10 meaningful factors to predict entrepreneurial activity category, the half (5/10) were economic freedom factors and the other half (5/10) were the factors of entrepreneurial conditions. In general, the effects of property rights is not surprising as it has been shown in many studies the greatest or one of the greatest economic-freedom predictor of economic activity and well-being in advanced economies of OECD (Georgescu and Kinnunen, 2019; Kinnunen et al., 2017) and EU (Georgescu et al., 2018), as well as, less developed countries-in-transition (Kinnunen, 2018; Kinnunen et al., 2019), while Mandić et al. (2017) had shown importance of economic freedom index directly on entrepreneurial activity in selected EU countries; similarly, specifically, the importance of R&D is imminent (cf. Kiselakova et al., 2018; Duľová et al., 2017). Most interesting important factors are Fiscal health and Cultural and social norms, the 2nd and 3rd important factors, respectively. Fiscal health has often been found one of the less-important economic freedoms, when predicting economic activity and well-being (e.g., Georgescu et al., 2018), while Cultural and social norms is a complex phenomenon and possible the hardest entrepreneurial condition (V2-V13) to manage by governmental actions. This will lead to some future research suggestions in the following concluding section.

DISCUSSION AND CONCLUSIONS

Early-stage entrepreneurial activity is a crucial driver for wider economic activity and an important field to provide dynamism, which are increasingly important under turbulent times leading to diverse economic shocks requiring resilience and dynamism to overcome them. Drivers of entrepreneurial activity were studied from a combination of macro and micro perspectives in terms of (macro)economic freedoms and entrepreneurial conditions. The methods of neural network analysis and multiple correspondence analysis were applied to capture effects of categorical data (MCA) and complex relationships of independent variables and the dependent total entrepreneurial activity (TEA).

Multiple correspondence analysis revealed two clusters in section 3.1, when considering the two most important dimensions (explaining 31.7% of the total variation of our 27 variables): the “top-cluster” characterised by highest entrepreneurial conditions including the index and R&D transfers, governmental support and policies, supporting taxation and bureaucracy, financing for entrepreneurs and internal market openness and the “low-cluster” characterised also by entrepreneurial conditions index and R&D transfers, but otherwise mainly only by economic freedoms. Only handful of countries were closely related to these two clusters, but these implied that on the top level, micro perspective and entrepreneurial conditions are what matter, while on lowest level, macro perspective plays an equal or larger role. It must be noted that, while the medium-level countries were not related to most important factors on the first two dimensions, neither were the countries with highest entrepreneurial activity (by TEA), except USA and United Arab Emirates, while Ecuador and Madagascar, which belonged to the highest quartile by TEA, popped up related to the countries and low-class factors or economic freedoms and entrepreneurial conditions.

By neural network analysis in section 3.2, the economic freedoms and entrepreneurial conditions were shown both to include important predictors of TEA. Thus, the question of a matter of economic freedoms or economic conditions cannot be answered either or, but the results imply that both are crucial. Not surprising, property rights, investment, labour and business freedoms were on the top of the importance list of the economic freedom variables; similarly R&D transfers, entrepreneurial financing, governmental support and policies, as well as, internal market
dynamics in the (early-stage) entrepreneurial activity may be expected; on the other hand, fiscal health (of governments related to balanced budgets and limited debt) was less expected; also, cultural and social norms were found as one of the most important of the entrepreneurial conditions, which does not offer easy policy implications as such norms are utterly difficult to manage by political decisions. The used data source of this study, Global Entrepreneurial Monitor, provides another large dataset on entrepreneurial attitudes and our results (cf., the role of cultural and social norms) call for extending the research using also this data. Other suggestions for future studies arise from the use of only 2019 data for both economic freedoms and entrepreneurial conditions, which may not give well-generalisable results. Thus, a longer study period is suggested. It may detect, e.g. if certain economic freedoms are a prerequisite for entrepreneurial conditions, or vice versa, leading to increasing entrepreneurial activity, and it may lead to more generalisable and stable results as the neural network results may be unstable with a small dataset. Logistic regression or discriminant analysis may offer superior for neural network approach.

REFERENCES


SOCIAL ENTREPRENEURSHIP: A SYSTEMATIC REVIEW OF THE DEFINITION USING A DESCRIPTIVE DEFINITION FRAMEWORK
Lusapho Njenge¹ and Teresa Carmichael²

Abstract:
Social entrepreneurship research has been identified as lacking a coherent research approach with no clear commonly accepted definition of the meaning of the term. The challenges around the definition and conceptual strategies are not unique to social entrepreneurship, but can also be found in the related field of general entrepreneurship research. This paper adopts a systematic approach to reviewing the literature on the definition of social entrepreneurship. It limits the analysis of definitions to highly cited articles in the top five entrepreneurship journals. A total of 42 unique definitions were analyzed using a definition framework that is made up of a *definiens*, *copula* and *definiendum*. The analysis identifies the characteristics of the social entrepreneur, the activities of the social entrepreneurship process and business practices employed in a social enterprise as areas with divergent views. Definitions for a social entrepreneur, a social enterprise and social entrepreneurship are proposed.

Keywords: Descriptive definition, social enterprise, social entrepreneurship, social entrepreneur, *definiens*, *definiendum*, *copula*, genus, differentia.

INTRODUCTION

Social entrepreneurship research has been described as lacking a coherent research approach with no clear definition of what the term actually means (Light, 2009, Nicholls, 2010, Short et al., 2009). While considered simple, the term has varied, and complex meanings (Lepoutre et al., 2013, Trexler, 2008) and the absence of a unified definition has impeded the advancement of social entrepreneurship research (Zahra et al., 2009). Social entrepreneurship, as a research area, is a contested concept with numerous competing definitions and no framework that seeks to unify these differences (Choi and Majumdar, 2014). The challenges around the definition and conceptual approaches are not unique to social entrepreneurship, and can also be found in the related field of entrepreneurship research (Pantea, 2015). While there seems to be acknowledgement about the complexity and ambiguity of the term social entrepreneurship, there is limited evidence that suggests an effort to come up with an all-inclusive definition that can be accepted by the social entrepreneurship research and practice communities. Instead of seeking to clarify the definition of social entrepreneurship, the area that seems to be of interest to researchers is the personality or the characteristics of social entrepreneurship or a social entrepreneur. Bacq and Janssen (2011) for example, while attempting to define social entrepreneurship, end up discussing visionary or innovative approaches, the importance of ethics, ability to identify opportunities, and the drive to make a difference.

PURPOSE

This paper adopts a systematic approach to reviewing the literature on the definitions of social entrepreneurship, social enterprise and social entrepreneur. The objectives of the study are to discover the scale and scope of the differences in these definitions, identify relevant themes from literature using a framework for descriptive definitions, and propose all-encompassing definitions for each of the three concepts.

METHODOLOGY

The paper did the review in a systematic manner that entailed several steps. Firstly, the review was limited to the top-five, peer-reviewed journals, according to a composite ranking of entrepreneurship journals by (Stewart and Cotton, 2013). Ranking of journals can be a subjective matter, especially for researchers. Although unavoidable, the rankings can result in rigid research standards, a focus on the number of articles as opposed to contributing to the research field, and can be to the detriment of specialized research that can be accommodated in newer journals (Van Fleet et al., 2000). Two ways of ranking journals are either through surveying academics about how they perceive the quality of journals in their field or through citations analysis. Most journal rankings utilize the citation approach (Stewart and Cotton, 2013) because of the sampling and perceptual biases inherent in surveys. The citation approach, however, also has its limitations. A paper may be cited because it is easily available rather than particularly

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² Wits Business School, South Africa
relevant, or cited because it draws a lot of criticism (Gorman, 2008). Journal paper citations can also be influenced by snowballing, which is when a citation by a prominent scholar results in other scholars citing the same paper (Aldrich et al., 1994).

Despite the shortcomings of the citation approach, numerous indices have been developed and used to rank journals. These include the Social Sciences Citation Index (SSCI), the Journal Impact Factor (JIF) and Scopus. Scopus has two evaluation measures, the Scimago Journal Rank (SJR), which assigns a higher weighting to citations from prestigious sources, and Source Normalized Impact per Paper (SNIP) which weights citations on the total number of citations per subject field (Stewart and Cotton, 2013).

Google Scholar can also be used to search for academic publications and has functionalities that allow for searching to be done by journal, by author, by date range, by ranking, by author prominence, by citation count or by previous papers by an author(s). Harzing’s Publish or Perish can utilize the sources from Google Scholar and report with statistics on journal impact.

The myriad of citation indices invariably leads to a debate about which one is best, and questions the usefulness ranking journals in some research fields. One way of overcoming this debate and criticism is to utilize as many indices as possible. This approach of using many indices was used by Stewart and Cotton (2013) to rank 59 entrepreneurship journals, using the following six citations measures: two and five-year measures for JIF, two and five-year measures of average citations for Harzing’s, SNIP and SJR. The top five ranked papers in descending order are the Journal of Business Venturing, Entrepreneurship Theory and Practice, Family Business Review, Journal of Small Business Management and Small Business Economics. These five top-ranked journals formed the basis for this systematic literature review on the definition of social entrepreneurship.

A separate query was done for each of the five journals on 26th August 2017, using the search phrase (“social enterprise” OR “social entrepreneurship” OR "social entrepreneur") AND (define OR definition) on Harzing’s. Only papers with 50 or more citations were considered for the analysis. The reason for introducing the exclusion criterion was to limit the number of documents to be analyzed and focus on papers that one could consider seminal. Although there is no minimum number of citations for a paper to be considered seminal, one that has been cited at least 50 times has likely contributed to its research field.

The three leading journals in social entrepreneurship, namely Social Enterprise Journal, Journal of Social Entrepreneurship and International Journal of Social Entrepreneurship and Innovation, were also considered for the systematic literature review. Separate queries on Harzing’s did not identify journals that met the selection criteria. Table 1 details the search results for the five entrepreneurship journals.

Table 1: Search results per journal on Harzing's Publish or Perish

<table>
<thead>
<tr>
<th>Name of Journal</th>
<th>Total # papers</th>
<th>Total # citations</th>
<th>Avg citations per paper</th>
<th># Papers ≧ 50 citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Business Venturing</td>
<td>30</td>
<td>3,096</td>
<td>103.2</td>
<td>13</td>
</tr>
<tr>
<td>Entrepreneurship Theory and Practice</td>
<td>69</td>
<td>8,014</td>
<td>116.1</td>
<td>33</td>
</tr>
<tr>
<td>Family Business Review</td>
<td>3</td>
<td>170</td>
<td>56.7</td>
<td>1</td>
</tr>
<tr>
<td>Journal of Small Business Management</td>
<td>23</td>
<td>939</td>
<td>40.8</td>
<td>7</td>
</tr>
<tr>
<td>Small Business Economics</td>
<td>23</td>
<td>453</td>
<td>19.7</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>12,673</td>
<td>85.6</td>
<td>57</td>
</tr>
</tbody>
</table>

The results from the search do not entirely correlate with the overall journal rankings by Stewart and Cotton (2013). While the third, fourth and fifth journals from a citation per paper analysis agree with the rankings, Entrepreneurship Theory and Practice ranks first on the number of citations per paper, and also on the overall number of papers published, but ranks lower than the Journal of Business Venturing on the Stewart and Cotton (2013) ranking. This poor correlation can be caused by several things, such as the research interests of the journal and ease of access to articles published.

The analysis of the 57 papers for full, descriptive definitions revealed that only 22 articles contained definitions of social entrepreneurship, social entrepreneur or social enterprise. The 35 papers not containing definitions were rescanned to confirm this and to understand why they had shown up in the Harzing’s query results. The papers included definitions of other constructs such as entrepreneurship, sustainable entrepreneurship and environmental entrepreneurship and mentioned social entrepreneurship; these 35 were not considered for the coding stage of the literature review.
The 22 papers were analyzed only for full, descriptive definitions using Atlas.ti software. Definitions can be either full (explicit) or partial (implicit) (Hansson, 2010, Marciszewski, 1994). Explicit definitions have three components, the *definiendum* (the word being defined), the *definiens* (that which does the defining) and a *copula*, which is the verb or phrase connecting the *definiendum* and the *definiens* (Burek, 2004, Kublikowski, 2009, Sager and L'Homme, 1994). The *definiens* comprises a *differentia* and *genus* (Smith, 1995). *Genus* refers to the general group or class that the *definiendum* belongs to, and the *differentia* are the differences that distinguish the *definiendum* from the *genus* to which it belongs.

A total of 52 definitions were found in the 22 papers. Most papers cited more than one definition, and some went further to analyze these definitions within the context of social entrepreneurship as a contested concept and attempted to come up with their own definition. One notable paper, Zahra et al. (2009) cited 20 definitions from various sources such as academic journals, books, business schools and organizations involved in social entrepreneurship before constructing its definition. It is worth noting that approximately one-third of the definitions were from the 2005 to 2007 period. It appears that there was a concerted effort during this period to establish a standard definition. The period after 2008 is dominated by the view that social entrepreneurship is a contested research area. Three definitions were cited a total of thirteen times. The ten duplicate definitions were eliminated, which resulted in 42 unique definitions. The papers whose definitions were cited in more than one article are Austin et al. (2006) with three citations, Mair and Marti (2006) with seven citations and Reis and Clohesy (1999) with three citations.

Most of the definitions used to derive new definitions originated from journals in the broader field of management such as the Journal of World Business, Harvard Business Review and Business Strategy and Review. This predominance is even though the five entrepreneurship journals used for the review had been in existence for many years. The Journal of Business Venturing, for example, published its first volume in 1985 and the Family Business Review started in 1988. While this could be an indication of the broad interest in social entrepreneurship research, it can also be a barometer of how entrepreneurship researchers have fared in formulating a commonly accepted definition of social entrepreneurship.

**ANALYSIS**

The 42 unique definitions were categorized by classifying social enterprises or ventures, social entrepreneurship or social entrepreneur as the *definiendum*, and then each category was coded separately for the *copula* and *genus*. The **definiendum** was broken down into a *genus* and *differentia*. The codes per definition, findings and recommendations are shown in Tables 1 to 5 below.

<table>
<thead>
<tr>
<th>Code</th>
<th># quotations</th>
<th>Areas of interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definiens – Social enterprise</td>
<td>9</td>
<td>Purpose, mission, outcomes, behaviour</td>
</tr>
<tr>
<td>Definiens – Social Entrepreneur</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Definiens – Social Entrepreneurship</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Differentia – Social Enterprise</td>
<td>24</td>
<td>Outcomes, behaviour</td>
</tr>
<tr>
<td>Differentia – Social Entrepreneur</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Differentia – Social Entrepreneurship</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Genus – Social Enterprise</td>
<td>16</td>
<td>Governance, enterprise type</td>
</tr>
<tr>
<td>Genus – Social Entrepreneur</td>
<td>73</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Genus - Social Entrepreneurship</td>
<td>95</td>
<td>Location, objectives, behaviour, characteristics</td>
</tr>
</tbody>
</table>

The key to reading Tables 3, 4 and 5 is as follows: 
- **Definiendum** is bolded; **Copula** is shaded; **Genus** is underlined. **Differentia** are italicized.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Source</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social entrepreneurship refers to <em>innovative activity with a social objective in either the for-profit sector, such as in social-purpose commercial ventures or corporate social entrepreneurship; or in the nonprofit sector, or across industries, such as hybrid structural forms which mix for-profit and nonprofit approaches</em>. Citations: Dees, 2001, Dees and Anderson, 2006, Austin et al, 2006</td>
<td>Emerson and Twersky, 1996</td>
<td>1996</td>
</tr>
<tr>
<td>Definition</td>
<td>Source</td>
<td>Year</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------</td>
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</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is the use of entrepreneurial behaviour for social ends rather than for-profit objectives or that the profits generated from market activities are used for the benefit of a specific disadvantaged group.</td>
<td>(Leadbeater, 1997)</td>
<td>1997</td>
</tr>
<tr>
<td>Under the narrow definition, social entrepreneurship typically refers to the phenomenon of applying business expertise and market-based skills in the nonprofit sector, such as when nonprofit organizations develop innovative approaches to earn income.</td>
<td>(Reis and Clohesy, 1999)</td>
<td>1999</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is the creation of viable socio-economic structures, relations, institutions, organizations and practices that yield and sustain social benefits.</td>
<td>(Fowler, 2000)</td>
<td>2000</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> focuses on the identification, evaluation, and exploitation of opportunities that yield a social return. (Citations: Alvord et al., 2004; Austin et al., 2006)</td>
<td>(Dees, 2001)</td>
<td>2001</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> in Germany, France, Belgium and Ireland refers to the third sector (économie solidaire) nonprofit ventures in the field of social services, financed and regulated by public bodies.</td>
<td>(Salomon et al., 2003)</td>
<td>2003</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is a multi-dimensional construct involving the expression of entrepreneurially virtuous behaviour to achieve the social mission...the ability to recognize social value-creating opportunities and key decision-making characteristics of innovation, proactiveness and risk-taking.</td>
<td>(Mort et al., 2003)</td>
<td>2003</td>
</tr>
<tr>
<td>Nordic countries use the concept of social entrepreneurship with reference to worker co-operatives in the childcare and healthcare sectors.</td>
<td>(Pestoff, 2004)</td>
<td>2004</td>
</tr>
<tr>
<td>In Spain, Italy and Portugal, social entrepreneurship refers to multi-stakeholder work integration programmes for groups typically excluded from the labor market.</td>
<td>(Borzaga and Spear, 2004)</td>
<td>2004</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is the work of community, voluntary and public organizations as well as private firms working for social rather than only for-profit objectives.</td>
<td>(Shaw, 2004)</td>
<td>2004</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is defined as entrepreneurial activity with the explicit objective of addressing societal pains. (Citation: Brooks, 2009)</td>
<td>(Seelos and Mair, 2005)</td>
<td>2005</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> focuses on addressing unmet societal needs and seeks to primarily generate social value. (Citation: Brooks, 2008)</td>
<td>(Mair and Marti, 2006, Nicholls, 2006)</td>
<td>2006</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is exercised where some person or group...aims at creating social value...shows a capacity to recognize and take advantage of opportunities...employs innovation...accepts an above-average degree of risk...and is unusually resourceful...in pursuing their social venture.</td>
<td>(Peredo and McLean, 2006)</td>
<td>2006</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is &quot;a set of institutional practices combining the pursuit of financial objectives with the pursuit and promotion of substantive and terminal values.&quot;</td>
<td>(Cho, 2006)</td>
<td>2006</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is a process equally possible in the nonprofit, public and private sectors.</td>
<td>(Bornstein, 2007)</td>
<td>2007</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is often defined as an innovation that leads to positive social change regardless of the mechanisms through which it is achieved (i.e. through earned income or contributed income).</td>
<td>(Tracey and Jarvis, 2007)</td>
<td>2007</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is the: 1) identification of a stable yet unjust equilibrium which excludes, marginalizes or causes suffering to a group which lacks the means to transform the equilibrium; 2) identification of an opportunity and developing a new social value proposition to challenge the equilibrium; and 3) forging a new, stable equilibrium to alleviate the suffering of the targeted group through imitation and creation of a stable ecosystem around the new equilibrium to ensure a better future for the group and society.</td>
<td>(Martin and Osberg, 2007)</td>
<td>2007</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> encompasses the activities and processes undertaken to discover, define and exploit opportunities to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner.</td>
<td>(Zahra et al., 2009)</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Social entrepreneurship</strong> is proposed to be the creation of an organization that results in a sustained social equilibrium.</td>
<td>(McMullen, 2011)</td>
<td>2011</td>
</tr>
</tbody>
</table>
Social entrepreneurship is a professional, innovative and sustainable approach to systematic change that resolves social market failures and grasps opportunities. (Said Business School, 2015)

Social entrepreneurship is the art of simultaneously pursuing both a financial and a social return on investment (the double bottom line). (The Fuqua School of Business, 2015)

Social entrepreneurship is applying practical, innovative and sustainable approaches to benefit society in general, with an emphasis on those who are marginalized and poor. (Schwab Foundation for Social Entrepreneurship, 2015)

Social entrepreneurship is the process of using entrepreneurial and business skills to create innovative approaches to social problems. These nonprofit and for-profit ventures pursue the double bottom line of social impact and self-sustainability or profitability. (New York University, 2016)

Social entrepreneurship is the process whereby the creation of a new business enterprise leads to social wealth enhancement so that both society and the entrepreneur benefit. (Wharton School, 2016)

Although there are varied definitions of social entrepreneurship, with some country- and region-specific definitions, an analysis of the genus from the codes presented in Table 2.2 suggests that it is a multi-dimensional process in newly established and existing businesses. The dimensions or activities within the process would differ according to the environment in which the process unfolds.

The following definition is proposed:

Social entrepreneurship is a process of complementary activities in new or existing businesses that seek to achieve a social goal or social objectives.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Source</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;The main purpose of a social venture is not the maximization of profit but the pursuit of economic, social, or environmental goals, or a combination of these, to alleviate social exclusion and unemployment.&quot;</td>
<td>(Organisation for Economic Co-operation and Development, 1999)</td>
<td>1999</td>
</tr>
<tr>
<td>The social enterprise spectrum consists of different kinds of organizations on a continuum from &quot;purely philanthropic&quot; to &quot;purely commercial&quot;.</td>
<td>(Dees, 2001)</td>
<td>2001</td>
</tr>
<tr>
<td>The United Kingdom defines social enterprises as independent sector for-profit or nonprofit ventures that use quasi-market mechanisms to increase efficiency in service provision.</td>
<td>(Salamon et al., 2003)</td>
<td>2003</td>
</tr>
<tr>
<td>In Latin America, Asia and Africa, social enterprises encompass non-governmental organizations with few earned-income options to for-profit start-up ventures with a social mission. (Citations: Austin et al., 2006; Bornstein, 2007)</td>
<td>(Seelos and Mair, 2005)</td>
<td>2005</td>
</tr>
<tr>
<td>Social enterprises make profits in the face of risk with the involvement of a segment of society and where all or part of the benefits accrue to that same segment of society.</td>
<td>(Tan et al., 2005)</td>
<td>2005</td>
</tr>
<tr>
<td>Nonprofit organizations surface as a separate organizational form to serve the needs of society that are unmet by government and private companies. Organizations classified as nonprofits share two commonalities: they are formed with the intent of fulfilling a social purpose, and they do not distribute revenues as profits.</td>
<td>(Boris and Steuerle, 2006)</td>
<td>2006</td>
</tr>
<tr>
<td>United States social ventures occur in a diverse array of organizational forms, from nonprofit organizations that involve earned-income activity to for-profit companies that have a social purpose.</td>
<td>(Short et al., 2009)</td>
<td>2009</td>
</tr>
<tr>
<td>Social enterprises seek to attain a social objective or set of objectives through the sale of products and/or services, and in doing so aim to achieve financial sustainability independent of government and other donors. Social</td>
<td>(Di Domenico et al., 2010)</td>
<td>2010</td>
</tr>
</tbody>
</table>
enterprises thus share the pursuit of revenue generation with organizations in the private sector as well as the achievement of social (and environmental) goals of nonprofit organizations.

Social enterprises deliver targeted social or community benefits using traditional business principles.

(Australia Capital Territory Government, 2016)

2016

Regarding the social enterprise definitions, the genus focuses on the organizational form and the business practices used in social enterprises, and the differentia refer to the mission or goal of social enterprises. The purpose and mission are what distinguish social enterprises from other business forms. The business practices, as well as the mission and goal, differ from one social enterprise to the next. These aspects of the definition (i.e. the business practices and mission), it is proposed, should be left open and added to as more research is conducted. The following definition is, therefore proposed:

A social enterprise is a for-profit or nonprofit organization that utilizes business practices to achieve a social goal or set of social objectives. The business practices include, but are not limited to, product and service provision, increasing efficiency and pursuing innovation.

Table 5: Definitions of the social entrepreneur over time

<table>
<thead>
<tr>
<th>Definition</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social entrepreneurs</strong> are driven by a desire for social justice. They seek a direct link between their actions and an improvement in the quality of life for the people with whom they work and those that they seek to serve. They aim to produce solutions which are sustainable financially, organizationally, socially and environmentally.</td>
<td>(Thake and Zadek, 1997)</td>
<td>1997</td>
</tr>
<tr>
<td><strong>Social entrepreneurs</strong> are individuals continually looking for new ways to serve their constituencies and add value to existing services.</td>
<td>(Brinckerhoff, 2000)</td>
<td>2000</td>
</tr>
<tr>
<td><strong>Social entrepreneurs</strong> play a role as change agents in the social sector by 1) adopting a mission to create and sustain social value (not just private value); 2) recognizing and relentlessly pursuing new opportunities to serve that mission; 3) engaging in the process of continuous innovation, adaptation and learning; 4) acting boldly without being limited to the resources in hand, and 5) exhibiting heightened accountability to the constituencies served and for the outcomes created.</td>
<td>(Dees, 2001)</td>
<td>2001</td>
</tr>
<tr>
<td><strong>Social entrepreneur</strong> is a major change agent, one whose core values center on identifying, addressing and solving societal problems.</td>
<td>(Drayton, 2002)</td>
<td>2002</td>
</tr>
<tr>
<td><strong>Social entrepreneur</strong> creates innovative solutions to immediate social problems and mobilizes the ideas, capacities, resources and social arrangements required for social transformation.</td>
<td>(Alvord et al., 2004)</td>
<td>2004</td>
</tr>
<tr>
<td><strong>Social entrepreneurs</strong> are motivated by social objectives to instigate some form of new activity or venture.</td>
<td>(Harding, 2004)</td>
<td>2004</td>
</tr>
<tr>
<td><strong>Social entrepreneurs</strong> develop products and services that “cater directly to basic human needs that remain unsatisfied by current economic or social institutions”.</td>
<td>(Seelos and Mair, 2005)</td>
<td>2005</td>
</tr>
<tr>
<td><strong>The social entrepreneur</strong> can actively contribute to social change with the creativeness and innovative-orientation typical of the classical entrepreneurial process.</td>
<td>(Perrini and Vurro, 2006)</td>
<td>2006</td>
</tr>
<tr>
<td>Similarly, <strong>social entrepreneurs</strong> identify opportunities to address an underserved social market or to provide services in a different or more efficient manner to affect a community in a positive way.</td>
<td>(Miller et al., 2010)</td>
<td>2010</td>
</tr>
</tbody>
</table>

The social entrepreneur genus looks at the characteristics of a social entrepreneur as well as the delivery of sustainable products and services. The differentia, like those of the social enterprise, look at the social goal or objectives that the social entrepreneur seeks to achieve. The characteristics of a social entrepreneur, like those of
an entrepreneur, are forever changing, with new ones added as the operating environment of the social entrepreneur changes. The following definition is, therefore proposed:

A social entrepreneur utilizes a set of appropriate entrepreneurial skills to deliver sustainable solutions that seek to achieve a social goal or social objectives.

CONCLUSION

Using the definiendum, copula and definiens (genus and differentia) approach to analyze the three concepts of a social entrepreneur, social enterprise and social entrepreneurship definitions, the general agreement was found in some areas of the definition, particularly the definiens, copula and differentia. The area that reveals varying views is the genus. Rather than seeing this as a contested terrain, it should be left open to continuous improvement as new characteristics of a social entrepreneur, entrepreneurial processes in social entrepreneurship and business practices in social enterprises emerge.

REFERENCES


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MEASURING THE LONG-TERM HEALTH OF SELECTED BRANDS IN AN EMERGING MARKET USING THE BRAND HEALTH INDEX

Theuns Pelser¹, Ayanda Khumalo² and Hein Prinsloo³

Abstract:
Brand building is crucial in any competitive market. A strong brand can create opportunities for growth, a larger market share, establish an entry barrier for competitors and help maintain consumer loyalty. A brand that performs at its optimum capacity is an asset to a company and is linked to a high brand health index score. Using the Brand Health Index (BHI), this paper evaluated the brand health of selected companies on the Johannesburg Stock Exchange (JSE) over the period December 2001 to December 2017.

The aim of this study was to evaluate the health of selected brands of South African companies listed on the JSE and determine the relationship between brand health and profitability. A non-probability sample of 28 brands from the target population that consisted of brands competing on the Johannesburg Stock Exchange in South Africa were selected for the study. To measure the financial value of the health of a brand over time, the regression method was applied to determine the relationship between BHI and financial performance.

The study used two-way cluster-robust error regression and found that there is a positive and significant relationship between BHI and Earnings Per Share (EPS) as well as Return On Asset (ROA) on listed companies on the JSE and secondly shows that a longer-term BHI measure – 10-year BHI – has a better explanatory power than shorter-term BHI measures namely, a 5-year, 6-year, 7-year, 8-year and 9-year BHI. This article provides evidence of the relationship between BHI and earnings per share (EPS), and also a significant relationship between BHI and return on asset (ROA).

Keywords: Brand Building; Brand Health Index (BHI); Earnings per Share (EPS); Return on Asset (ROA).

INTRODUCTION

With evolving competition and technological changes, companies are now trading in an environment where produced goods and services are approximately identical, leaving organisations with fewer options than to differentiate their products from those of the competitors. This differentiation can be done through what Keller (2009, p.15) calls “branding”. Brand building forms an integral part of any competitive market. A strong brand can create opportunities for growth and a larger market share; it can establish an entry barrier for competitors and help maintain consumer loyalty.

According to Aydin and Ulengin (2015), there is growing evidence of achieving or attaining a competitive advantage through linking branding and marketing excellence. This confirms the research of Chaudhuri and Holbrook (2010) that indicates the importance of marketing to attract customers to a company, which subsequently leads the company to perform better. The brand equity theory is the most distinguished and vital in the field of marketing, as it is known today (Fritz, Schoenmueller & Bruhn, 2017). This is due to the changes and adjustments in international accounting standards, in connection with the manner in which intangible assets are managed, which imply that the equity and strength of a brand receive extensive attention (Chaudhary, 2014).

Share price analysis includes the analysis of a company’s financial statements. Christodoulides and de Chernatony (2010, p.71) state that share price forecasting is conducted using technical analysis (analysis of price movements) or a fundamental analysis (analysis of financial statements) when formulating an investment view. However, little emphasis is placed on the analysis of an organisation’s brand health, despite the fact that branding plays a key role in the organisation’s revenue generation and in increasing organisational value. According to Plank (2012, p.17), valuing a company has become a much more complex process, because of the recognised value that branding contributes to an organisation.

Brand health is something new in business achievement measurement, and is a relatively new concept. Mirzaei, Gray, Baumann, Johnson and Winzar (2015) developed a long-term based behavioural measure called the BHI to evaluate the health of a brand. This was in response to the need for accountability in marketing and for assessing brand-building efforts over the long-term. The BHI is the first longitudinal measure that incorporates the long-term sales performance of a brand in measuring its health and provides managerial insights into effective long-term brand management. The authors (Mirzaei et al., 2015) conducted a longitudinal analysis from 2002 to 2011 and applying a two-way cluster-robust error regression showed that the BHI measure significantly, positively correlates with Return On Assets (ROA) and Earnings Per Share (EPS).

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3 North-West University, South Africa
The aim of the study was to measure the BHI of selected brands of companies listed on the JSE and determine the relationship between brand health and profitability. This study will, therefore, draw attention to the benefits of creating and maintaining a strong brand. The findings of the study were used in conjunction with the existing literature and current brand strategies available, to provide strategic recommendations to different companies listed on the JSE on the importance of maintaining a healthy brand. In the sections that follow, the concept is presented, and an overview of brand equity and identity in a B2B services context is provided. Therefore, the research methodology and findings are presented, followed by the discussion of the results and the implications thereof.

CONCEPTUAL BACKGROUND

Keller (2013, p.222) defines a brand as a strategic asset or resource that can be utilised as a promise that frequently needs to be delivered upon, in order to achieve brand identity. A brand, according to Chaudhuri and Holbrook (2010, p. 203), can also be described as a way to separate or differentiate goods or services of a particular organisation in a market setting, with the goods or services of another organisation. Branding provides the origin in which consumers can bond, identify and enjoy a product or service offering (Chaudhuri & Holbrook, 2010, p.196). Thus according to Zhang (2015, p73), a healthy brand is an identifiable product or service, place or person, marketed so that the end-user or consumer perceives the brand as something that is applicable, unique, with added value that can match the necessities of the customers intently.

Brand Equity Measurement

There is no single definition of brand equity as different studies focus on different aspects of brand equity (Kotler & Keller, 2012, p.105). Regardless of the differing perspectives, there is a central idea that defines brand equity as being related to the effects of marketing uniquely attributed to brands. Verster, Petzer and Cunningham (2019) discuss this in their study on the development of brand equity and use of brand identity dimensions in this journal. Farjam and Hongyi (2015, p. 17) found that there is no agreement on the methods to evaluate brand equity as different studies develop different techniques. Kotler and Keller (2012, p.105) state that brand equity is a major asset in marketing and is extensively studied in marketing literature.

Many models and techniques for measuring brands have been proposed by academics (Farjam & Hongyi, 2015, p.19). Lamb, Hair, McDaniel, Boshoff, Terblanche and Elliott (2015, p.363) state that there are three main perspectives on the measurement of brand equity – financial market outcomes, consumer attitudes and product market. Some popular metrics of customer mindset as a measure of brand equity are perceived quality, brand awareness and brand association (Mirzaei et al., 2015).

As it were, brand equity speaks to the psychological relationship and framework a consumer or client develops over time with a particular brand. This arrangement of reasonable affiliations with a brand is not something that can occur overnight, but instead takes a certain period to be built (Mirzaei et al., 2015). According to Chen and Green (2016), those benefits and liabilities can be further translated as loyalty to the brand, awareness of the brand, perceived quality, and associations of the brand.

Brand Health and Corporate Performance

According to Rooney (2015, p.78) brand health can be defined as a measure of how well an organisation or brand delivers on specific attributes of a product or service that it guarantees its customers and particularly how those attributes are seen by customers as far as quality and appeal. A healthy brand conveys predictable, vital, and individual encounters for the customer, while less attractive brand health is frequently associated with customer experiences that are conflicting and conveyed with minimal emotional connection to the customer (Zhang, 2015). Brand health is something new in business achievement measurement, and is a relatively new concept. Likewise, a brand’s health level is a pointer for the business to quantify their image mindfulness among the buyers instead of showing the accomplishment of the organisation itself. As expressed by Mizik (2014, p.16), a healthy brand is the sign of an organisation that is set up to flourish. In reality, these days an organisation ought to consider their brand health to keep up with or meet the brand equity as both are related. In brand health, some business specialists estimate it through the resilience and the responsiveness of the customers (Qiang, 2011, p.89).

Mirzaei et al. (2015) developed a long-term based behavioural measure called the BHI to evaluate the health of a brand. This was in response to the need for accountability in marketing and for assessing brand building efforts long-term. The BHI is the first longitudinal measure that incorporates the long-term sales performance of a brand in measuring its health and provides managerial insights into effective long-term brand management. Mirzaei et al. (2015) conducted a longitudinal analysis from 2002 to 2011 and applying a two-way cluster-robust error regression showed that the BHI measure is significantly positively correlated with ROA and EPS.
Kim and Richarme (1986, p.96), found a relationship between an organisation’s advertising and marketing expenses and its fairly estimated market value, when supporting the link between a company’s brand building activities and its market value. Petersen and McAlister (2012, p.100) demonstrate that changes in brand equity are to a large extent associated with changes in a company’s value. A portfolio of brands identified as strong according to Interbrand’s valuation method displayed statistically and economically significant performance advantages compared with the overall market (Glaser, 2013, p.369). Based on these findings, Petersen and McAlister (2012, p.501) argue that companies that have created strong, healthy brands benefit their investors by yielding returns that are more noteworthy in scale.

Against this conceptual background, two research questions (RQs) were proposed:
RQ1: Does the BHI appropriately measure the health of South African brands?
RQ2: What is the relationship between brand health and corporate performance?

**METHODODOLOGY**

A positivistic research approach that was quantitative in nature was used for this study. For the purposes of data analysis, financial statements of various South African listed companies were obtained from Bloomberg Terminal.

A non-probability sample of 28 brands from the target population that consisted of brands competing on the Johannesburg Stock Exchange in South Africa were selected for the study. The brands that were analysed came from long-term insurance, short-term insurance, grocery stores and clothing stores, manufacturers, packaging industries, banking institutions, and telecommunications companies. The sampling units were selected according to the following criteria:

- The brands must have been trading in South Africa;
- The companies owning the brands must have been publicly held companies, listed on the JSE Securities Exchange; and
- The companies owning the brands must have been listed on the JSE for the last five years. The reason for this was so that the company financial performance could be tracked over a longer period, i.e. five years. To measure the financial value of the health of a brand over time, the regression method was applied to determine the relationship between the BHI and financial performance. The brand health scores for the identified brands were paired with the BHI and financial performance for their holding companies for the same years and a standard deviation and correlation analysis was conducted in order to determine if a relationship exists between them and if it does exist, the direction and strength of such a relationship. In order to measure the financial value of a particular brand over time, this study had applied a two-way cluster robust method to determine the relationship between the BHI, EPS, ROA, free cash flow and growth in share prices.

Concentrating on the purchasing habits on consumers, this study adopts the BHI of Mirzaei et al. (2015, p.96) as an unbiased measure of brand health. The BHI is centered on the two main drivers of brand value in the long term—growth and tenacity – and it is the part of sales growth in the long term to volatility in sales growth.

Using standard deviation as a representation of volatility, the health of a brand over a T-year period is given as:

\[
\text{Brand Health Index}_{it} (\text{BHI}_{it}) = \text{Sustained Growth} = \frac{\sum_{t=2}^{T} \text{Growth}_{it}}{\text{SD}_{gt(t-T,t)}}
\]

\[
\text{Growth}_{it} = \frac{(\text{Sales}_{it} - \text{Sales}_{it-1})}{\text{Sales}_{it-1}}
\]

\[
\text{SD}_{gt(t-T,t)} = \sqrt{\frac{\sum_{t=t}^{T} \text{Growth}_{it} - \text{Growth}_{i(t-T,t)}}{T - 1}}
\]

Where:
- \(\text{Growth}_{it}\) = the growth of company \(i\) at time \(t\)
- \(\text{SD}_{gt(t-T,t)}\) = the standard deviation of growth of brand \(i\) from \(t-T\) to \(t\).

Growth is given as the relative difference between the sales in the current period and the sales in the previous period. Based on the above measure, the healthiest brands are the ones with the highest cumulative growth and lowest volatility over a T-year period.

For the researchers to be able to find out if the BHI has any information that could be of importance to the change in the financial performance of the company, this study links the BHI to financial measures of the ROA and EPS in line with Mirzaei et al. (2015) over a ten-year period ending December 2017. The study uses the ROA as a progressive metric, since it provides data on profitability prospects. Including the EPS measure enhances the validity of the findings of this study. In order to measure the financial value of a particular brand over time, this study has applied a two-way cluster robust method to determine the relationship between the BHI and the
company’s financial performance. According to Cameron, Gelbach and Miller (2011, p.85) a two-way error helps to control dependencies in time series and cross-sectional dependencies.

The two-way cluster-robust errors method enables us to control for clustering to prevent the under-estimation of standard errors and over-rejection (Cameron, Gelbach & Muller 2011). This study therefore uses this method to test the relationship between the BHI, EPS, ROA, free cash flow and growth in share prices of the selected companies of this study over time and across companies.

Thompson (2011) gives the two-way cluster robust covariance matrix or cluster VCE is given as:

\[ VCE(\hat{\beta}) = VCE_1(\hat{\beta}) + VCE_2(\hat{\beta}) - VCE_{12}(\hat{\beta}) \]

**FINDINGS**

Table 1 shows the number of listed companies sampled for this study. For the five-year BHI for example, the total number of companies for which data was available for the period 2001 to 2005 was 66; for the period 2005 to 2009, data was available for 85 companies; with 111 companies for the period 2009 to 2013; and 135 companies for the period 2013 to 2017. There was no data available for the ten-year BHI for the period 1994 to 2005; for the period 2000 to 2009, data was available for 58 companies; 85 companies for the period 2004 to 2013; and 105 companies for the period 2008 to 2017.

Table 1. Number of Companies

<table>
<thead>
<tr>
<th>Number of Companies</th>
<th>5 YR</th>
<th>6 YR</th>
<th>7 YR</th>
<th>8 YR</th>
<th>9 YR</th>
<th>10 YR</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66</td>
<td>59</td>
<td>52</td>
<td>46</td>
<td>43</td>
<td>-</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>88</td>
<td>85</td>
<td>83</td>
<td>77</td>
<td>65</td>
<td>58</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>111</td>
<td>106</td>
<td>102</td>
<td>95</td>
<td>88</td>
<td>85</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>135</td>
<td>127</td>
<td>119</td>
<td>116</td>
<td>111</td>
<td>105</td>
<td>2017</td>
</tr>
</tbody>
</table>

The results of the two-way cluster-robust errors regression for brand health are presented in Table 2. The BHI has a significant positive impact on ROA (\( \beta = 0.0028, t = 5.06, P < 0.05 \)) and the BHI is positively correlated with EPS (\( \beta = 1.3522, t = 4.4, P < 0.05 \)). The study also finds a significant positive impact on the ROA (\( \beta = 0.0028, t = 5.22, P < 0.05 \)) and a significant positive impact on the EPS (\( \beta = 0.3469, t = 3.63, P < 0.05 \)) for the six-year BHI. From Table 2 it can be seen that for the seven-year-based brand health, the BHI has a significant positive impact on ROA (\( \beta = 0.0026, t = 5.22, P < 0.05 \)) and is positively correlated with the EPS (\( \beta = 1.9927, t = 4.46, P < 0.05 \)). The BHI also has a significant positive impact on the ROA (\( \beta = 0.0019, t = 3.70, P < 0.05 \)) and positively correlated with the EPS (\( \beta = 0.3703, t = 3.62, P < 0.05 \)) for an eight-year-based brand health. For a nine-year-based brand health, the BHI has a significant positive impact on the ROA (\( \beta = 0.0019, t = 3.70, P < 0.05 \)) and positively correlated with the EPS (\( \beta = 0.370259, t = 32.62, P < 0.05 \)) (Table 4.6). Finally, Table 2 shows that for a ten-year-based brand health, the BHI has a significant positive impact on the ROA (\( \beta = 0.0030, t = 5.17, P < 0.05 \)) and is positively correlated with the EPS (\( \beta = 0.4129, t = 4.97, P < 0.05 \)).

Table 2. Year-based BHI

**Five-Year BHI**

<table>
<thead>
<tr>
<th>Year-based BHI</th>
<th>Number of observations</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA Coef.</td>
<td>Robust Std. Err.</td>
<td>t</td>
</tr>
<tr>
<td>BHI 0.0028</td>
<td>0.0005</td>
<td>5.06</td>
</tr>
<tr>
<td>c 0.0397</td>
<td>0.0043</td>
<td>13.72</td>
</tr>
</tbody>
</table>

Number of observations 397
R-squared 0.1062

**Six-Year BHI**

<table>
<thead>
<tr>
<th>Year-based BHI</th>
<th>Number of observations</th>
<th>394</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS Coef.</td>
<td>Robust Std. Err.</td>
<td>t</td>
</tr>
<tr>
<td>BHI 0.3469</td>
<td>0.0955</td>
<td>3.63</td>
</tr>
<tr>
<td>c 3.5365</td>
<td>1.2460</td>
<td>2.84</td>
</tr>
</tbody>
</table>

Number of observations 394
R-squared 0.0282

**Ten-Year BHI**

<table>
<thead>
<tr>
<th>Year-based BHI</th>
<th>Number of observations</th>
<th>394</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA Coef.</td>
<td>Robust Std. Err.</td>
<td>t</td>
</tr>
<tr>
<td>BHI 0.0028</td>
<td>0.0005</td>
<td>5.22</td>
</tr>
<tr>
<td>c 0.0576</td>
<td>0.0044</td>
<td>13.12</td>
</tr>
</tbody>
</table>

Number of observations 394
R-squared 0.1171
### Seven-Year BHI

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 1.9927 | 0.4464           | 4.46  | 0.0000 | 1.1147 - 2.8708   |
| c    | -32,8795 | 5,9480          | -5.53 | 0.0000 | -44,5788 - -21,1803 |

Number of observations 344
R-squared 0.0406

### ROA

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.0026 | 0.0005           | 5.22  | 0.0000 | 0.0016 - 0.0036   |
| c    | 0.0587 | 0.0046           | 12.83 | 0.0000 | 0.0497 - 0.0676   |

Number of observations 344
R-squared 0.1003

### Eight-Year BHI

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.370259 | 0.1023352      | 3.62  | 0.0000 | 0.1688 - 0.5718   |
| c    | 3.502648 | 1.415565        | 2.47  | 0.0140 | 0.7153 - 6.2900   |

Number of observations 302
R-squared 0.0366

### ROA

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.0019 | 0.0005           | 3.70  | 0.0000 | 0.0009 - 0.0030   |
| c    | 0.0645 | 0.0055           | 11.68 | 0.0000 | 0.0536 - 0.0753   |

Number of observations 302
R-squared 0.0549

### Nine-Year BHI

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.370259 | 0.1023352      | 3.62  | 0.0000 | 0.1688 - 0.5718   |
| c    | 3.502648 | 1.415565        | 2.47  | 0.0140 | 0.7153 - 6.2900   |

Number of observations 302
R-squared 0.0366

### ROA

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.001945 | 0.000526      | 3.7   | 0.0000 | 0.0009 - 0.0030   |
| c    | 0.064478 | 0.0055227      | 11.68 | 0.0000 | 0.0536 - 0.0753   |

Number of observations 302
R-squared 0.0549

### Ten-Year BHI

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.4129 | 0.0830           | 4.97  | 0.0000 | 0.2493 - 0.5766   |
| c    | 2.3860 | 1.2616           | 1.89  | 0.0600 | -0.1006 - 4.8727  |

Number of observations 243
R-squared 0.0845

### ROA

| EPS  | Coef.  | Robust Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|------|--------|------------------|-------|------|-------------------|
| BHI  | 0.0030 | 0.0006           | 5.17  | 0.0000 | 0.0018 - 0.0041   |
| c    | 0.0523 | 0.0060           | 8.74  | 0.0000 | 0.0405 - 0.0641   |

Number of observations 243
R-squared 0.1486
Overall, the ten-year-based BHI proved to have a better explanatory power with an R-squared of 0.1486 for the ROA and an R-squared of 0.0845 for the EPS. The BHI also has a better explanatory power for ROA than for the EPS with the R-squared for each period of analysis higher for the ROA than for the EPS.

Evidence suggests that there might be differences in the relationship between brand health and shareholder returns or companies’ performance between different sectors. According to Ronquest-Ross, Vink and Sigge (2018) the South African customer compares perceptions with expectations when judging a company’s service quality. Table 3 presents an analysis of the BHI according to sectors. On a five-year basis, the healthcare equipment and services industry had the highest BHI with a BHI of 17.5, while the food and drug retailers industry had the highest BHI for the six-year, seven-year and eight-year BHI. The healthcare equipment and services industry had the highest BHI on the nine-year basis while the food and drug retailers had the highest BHI on a ten-year basis. Overall, the food and drug retailers industry had the highest BHI with an average BHI of 17.7. The findings concur with those of da Veiga and Swartz (2017) as they stated that intense competition in South Africa’s industries has grown significantly, because technological developments have put pressure on businesses.

Table 3. Industry Analysis of BHI

<table>
<thead>
<tr>
<th>Sector</th>
<th>5-Year</th>
<th>6-Year</th>
<th>7-Year</th>
<th>8-Year</th>
<th>9-Year</th>
<th>10-Year</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Drug Retailers</td>
<td>16.1</td>
<td>17.83</td>
<td>18.1</td>
<td>13.3</td>
<td>19.3</td>
<td>21.6</td>
<td>17.7</td>
</tr>
<tr>
<td>Healthcare Equipment &amp; Services</td>
<td>17.5</td>
<td>16.41</td>
<td>17</td>
<td>9.3</td>
<td>23.5</td>
<td>10.9</td>
<td>15.8</td>
</tr>
<tr>
<td>Software &amp; Computer Services</td>
<td>14.1</td>
<td>12.88</td>
<td>15.7</td>
<td>11.9</td>
<td>18.9</td>
<td>20</td>
<td>15.6</td>
</tr>
<tr>
<td>Travel &amp; Leisure</td>
<td>10.6</td>
<td>11.82</td>
<td>11.8</td>
<td>12.5</td>
<td>14.2</td>
<td>16.7</td>
<td>12.9</td>
</tr>
<tr>
<td>General Retailers</td>
<td>9.5</td>
<td>10.62</td>
<td>11.3</td>
<td>13</td>
<td>13.3</td>
<td>14.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Construction &amp; Materials</td>
<td>8.3</td>
<td>9.09</td>
<td>8.4</td>
<td>11.1</td>
<td>9.3</td>
<td>9.9</td>
<td>9.3</td>
</tr>
<tr>
<td>Automobiles &amp; Parts</td>
<td>7.8</td>
<td>7.05</td>
<td>8.4</td>
<td>9.4</td>
<td>10.9</td>
<td>11.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Pharmaceuticals &amp; Biotechnology</td>
<td>5.3</td>
<td>5.85</td>
<td>6.4</td>
<td>13</td>
<td>8.3</td>
<td>10.8</td>
<td>8.3</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>7.7</td>
<td>7.26</td>
<td>8.5</td>
<td>6.9</td>
<td>7.5</td>
<td>7.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Chemicals</td>
<td>5.5</td>
<td>6.54</td>
<td>6.8</td>
<td>9.6</td>
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<td>7.4</td>
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<td>8.7</td>
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<td>7.5</td>
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<tr>
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<td>4.9</td>
<td>3.9</td>
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<td>2.17</td>
<td>2.4</td>
<td>3.7</td>
<td>3.1</td>
<td>3.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Real Estate Investment &amp; Services</td>
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<td>1.91</td>
<td>2.5</td>
<td>2.7</td>
<td>2.4</td>
<td>1.7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Given the bi-directional relationship existing between brand health and corporate performance, the brand association is proven in the study. Being seen as a secondary association of a brand (Kotler & Keller, 2012), brand health is seen as one source to generate brand image. In addition, Kotler & Keller (2012) emphasise that while consumers’ associations with a brand emerge as secondary associations, they would affect brand image/associations and subsequently brand equity as consumers with knowledge of the brand will possess positive/negative associations towards the image of that brand. This is different from Kim and Richarme’s (1986) claims that the effects of the brands’ performance are category specific, whilst Fritz, Schoenmuller and Bruhn (2017) argue that the image of a brand has been found to be transferrable between different categories.
DISCUSSION

This section is structured according to the research questions identified earlier.

RQ1: Does the BHI appropriately measure the health of South African brands?

The research primary results support research question one. The correlation coefficient between industries varies, some were 0.0028 which indicates an extremely weak correlation between the brands’ relationship scores and the brand health index; for other industries the correlation coefficient was 1.9927 which indicates a strong correlation between the brands’ relationship scores and the brand health index. The regression and correlation analysis indicates that the BHI in measuring brand health of companies in South Africa is supported. Based on a theoretical perspective, the results would support the assertion that brand health would not necessarily always result in increased returns for shareholders that own the brand. Based on the primary study results, one might argue that the correlation between brand health and shareholder returns would be negative at market level as the different companies and brands are exposed to different market conditions. Based on the results from the empirical study it appears to support the latter view. Evidence suggests that there might be differences in the relationship between brand health and shareholder returns/companies performance between different sectors. The sectors’ results under investigation potentially create a link between brand health and shareholder value/companies’ performance. Kotler and Keller (2012) contend that the reason brands aim to establish brand loyalty is that when a brand earns the trust and loyalty of a consumer, the consumer is likely to repeat the positive experience rather than experiment with an untested product, so, loyalty is also important for warding off future competition.

The financial services’ sector results (see annexures) suggest that during the past years there has been a significant growth. The exception in this sector is Santam Ltd, which showed a moderate decline. The other companies in the same category are established businesses which adopted a different business model to keep up with today’s technology, while Santam still has to deal with traditional business models which rely heavily on brand building and TV advertising. This suggests the need for different branding strategies for different business models must be considered.

These results appear to suggest that, sectors of the market there might be a strong correlation between brand equity and shareholder return. It could also be concluded that, in one of the cases, the results appear to support research done by Maheshwari and Lodorfos (2014, p.63) who were able to demonstrate that changes in brand equity are associated with changes in firm value.

The results from the product construction and materials analysis (see annexures) are mixed. While the Wilson Bayly Holmes-Ovcon result indicates a constant growth throughout the years, the opposite is true for PPC Ltd. This situation is understandable considering that PPC is faced with competition and is competing in a growing market, while Afrimat is also not a monopoly.

The results from the food producer sector (see annexures) were negative, with RCL Foods, Oceana Group and Tongaat Hulets having negative results and as a result a negative brand health. This result is surprising, as one would have expected the trend to be the same as in the food and drug retailer sector. One would expect the two sectors to exhibit similar behaviour. This might suggest different consumer buying patterns for this category.

RQ2: What is the relationship between brand health and corporate performance?

According to the research done by Keller (2009, p.82), there are various dimensions namely; brand awareness, brand image, brand quality and brand loyalty, as highlighted in the theoretical framework presented in the literature review. Yet, to most South African brands that barely generate brand awareness in the market, brand loyalty does not occur at this stage. In light of the empirical findings, consumers, clients and purchasers cannot recognise most of the brands analysed. Furthermore, it complicates the BHI measurement in relation to the brand awareness due to the imprecise robustness in the brand categories. Therefore, for the South African brands that are listed on the JSE, the only way to survive is on building brand awareness.

Brand image according to Aydin and Ulengin (2015, p.63) plays an important role in the relationship between the brands and the BHI. BHI is seen as one source to generate brand image and its associations would affect brand image and subsequently the brand’s equity. From another perspective, researchers indicate that consumer brand image shifts when the BHI of the brand changes (Plank, 2012, p.82). These findings by Plank (2012, p.82) also point out that consumers have a specific brand image and an image could be adversely affected by its major brands’ performances in the other markets. Given the bi-directional relationship existing between brand health and corporate performance, the brand association is suggested.

Being seen as a secondary association of a brand (Kotler & Keller, 2012), brand health is seen as one source to generate a brand image. The authors (Kotler and Keller, 2012, p.70) emphasise that while consumers’ associations with a brand emerge as secondary associations, they would affect brand image/associations and subsequently brand
Brand health is a vital driver of brand exposure with a significantly strong result. According to the findings, there is evidence that the higher degree of brand health leads to an equally higher degree of brand awareness. There is growing pressure on the marketing fraternity to demonstrate the impact of the long-term health of a brand on company performance. The main reason for this study was to assist in bridging the knowledge gap that exists locally on the subject of brand equity, brand health measurement and brand valuations, and it is hoped that this research will initiate further research on the topic.

The result from the two-way cluster robust regression analysis indicated that brand health index score had a positive effect on corporate performance. This study found a significant relationship between the BHI and financial measures of the EPS and ROA. The study further found that the longer-term BHI measure (ten-year) had the highest explanatory factor as measured by the R-squared. The findings of this study are in line with those of Mirzaei et al. (2015) who also found a significant relationship between the BHI and EPS as well as the BHI and ROA. Mirzaei et al. (2015) further found that the longer-term BHI had a higher explanatory power as reported in the R-squared figures.

This study and the literature supported the positive relationship between the BHI and the financial performance of the organisation. At the end of the day, financial practitioners need to see how the BHI, as an indicator of brand strategy success, can be estimated, and how it tends to be constructed.

REFERENCES

AN INSIGHT INTO POTENTIAL FISCAL IMPLICATIONS OF THE GREAT LOCKDOWN FROM THE PERSPECTIVE OF SMALL STATES

Primož Pevcin1

Abstract:
The Great Lockdown, caused by the recent declaration of COVID-19 pandemic, has caused severe economic distractions to the majority of world countries. From the global perspective, a significant contraction in foreign direct investments and international trade has occurred, to some extent accompanied by the rising pressures for economic nationalism. This actually contributes to the de-globalization trends. Globalization was to an extent beneficial for smaller economies, and it was one of the factors contributing to the rise in the number of countries around the world during the last few decades. As a result, we have more than 200 countries around the globe today, and almost 40 percent of them are actually small countries (states), if we apply the criteria that enables such affiliation.

According to the perceived larger openness and vulnerability of smaller states, it is thus expected that those countries are much harder hit by the economic contraction, as their outputs are much more volatile in relation to the economic cycles. In this context, this paper intends to investigate the exposure of European states to the current lockdown, where the focus is particularly on assessing the fiscal impacts of the lockdown. The main research question is whether there are any differences regarding the fiscal functions of government between smaller and larger states. Specifically, these two questions are addressed through the cross-national comparative investigation based on the data for 44 European countries; and we specifically assess, how fiscal activities of government (governmental consumption versus transfer expenditures) differentiate among smaller and larger states.

The results of the study suggest that the effect of the size of the state does not affect the consumption spending of government, but for the transfer expenditures size variable matters. This piece of research would like to add to the development of the discipline of small state studies, in particular to the issue of their vulnerability and changing global economic environment.

INTRODUCTION

The current coronavirus (COVID-19) pandemic has caused one of the largest global health crises, and caused the situation of the Great Lockdown, term describing the current crisis, as coined by the IMF. Besides to major global economic disruptions leading to expected recession, almost all states have introduced, or are planning to introduce, some measures to soften the negative economic impacts of the lockdown, including also induced fiscal spending to counteract the sharp drop-off in economic activity. This spending can be in the range up to 20% of GDP for some states (see IMF, 2020).

In the context of small state studies, it can be argued that they are the ones that should be hard hit. Namely, current lockdown has caused also the enormous reduction in the foreign direct investments in the range up to 40 percent (UNIDO, 2020), and in the reduction in global exports, where particularly EU is under attack (UNCTAD, 2020). Namely, small states tend to be relatively much more open and integrated in to the global trade, thus the economic consequences of lockdown and associated return of (economic) nationalism are particularly evident for them. The data provided by the World Economic Outlook (2020) project a very harsh fall of GDP for some smaller European countries in particular (e.g., Iceland, Latvia, Estonia, Lithuania, Slovenia, Croatia, San Marino etc.), in particular if we compare those projections to other larger countries. This should be evident also in the rising social security and transfer spending, in order to provide the necessary safety net for the residents.

Moreover, as Rachman (2020) has argued this extraordinary crisis is not expected to lead to the full restoration of the globalized world after it ends, as evidence indicates the return of the nation states. They have more financial and organizational strengths than global institutions, global supply chains have shown their fragility, and political pressures for localization of production and protectionism have reinforced. Furthermore, the era of small government will be highly challenged per se after the current crisis (Traub, 2020).

Oxford Analytica (2020) has provided the assessments on the preparedness and export exposure to COVID-19 pandemic for specific countries. It is evident that for the majority of small European countries relatively high export exposure is assessed. This exposure tends to be, on average, larger for smaller states, in comparison to larger ones. The effect is perceived to be stronger because supply chains will be slower to recover. Supply chains are more likely to encounter bottlenecks as different countries remove travel and business restrictions at different rates. Thus, countries reliant on trade are particularly vulnerable to disruption also after the virus passes, and those countries include numerous small states.

Namely, small states’ characteristics is that their economy is driven by only few sectors the most, a notion sometimes described with characteristics of “plantation economies”, although this notion should not be taken literally. Thus, these economies are dependent, and include the history of key industry ownerships by multinational

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corporations, the repatriation of profits, and the limited to non-existent domestic linkages. Trade balance is mostly in favor of larger and more developed countries, resulting in features of income distribution that effectively discriminate against economic transformation. In essence, this indicates that small economies tend to be rather disproportionately affected by the shifts in global economic patterns due to demand- and supply-side shocks; they are at higher risk to be deprioritized in global supply chains, and they are at a major risk of disruption if they tide towards achieving truly globalized economy changes (Hackshaw, 2020). Similar findings have already been observed during the Great Recession period, roughly a decade ago.

Yet, after the lockdown ends it is expected that international economic environment will changes, and this will be challenging for small states in particular, as larger states are bound to become economically inward oriented. Moreover, all states will become more protectionist, and competition for attracting new businesses will increase (Shimmin, 2020). Thus, the trade transmission mechanism of external shocks is amplified within small states because of limited domestic markets, which increase the importance of international trade as a driver of growth. Furthermore, economic vulnerability is high in view of limited export diversification, and relative importance of tourism in production structure of the majority of small states. These factors suggest the arrival of challenging economic times in particular for small states, and this will reflect in the increasing fiscal stress (Keane, 2020; Coke-Hamilton, 2020).

In this context, this paper intends to investigate the exposure of European states to the current lockdown, where the focus is particularly on assessing the fiscal impacts of the lockdown. The main research question is whether there are any differences regarding the fiscal functions of government between smaller and larger states, measured by the share of government consumption and transfer expenditures in GDP. Specifically, since the crisis situation are perceived to have impact, we select two time periods, the crisis period of 2009-10 and the period of economic prosperity of 2017-18, in order to investigate any potential differences in the aggregate fiscal activities of governments, in order to portray expectations for the ongoing Great Lockdown crisis.

THEORETICAL FRAMEWORK AND METHODOLOGY

When addressing the topics related to small state studies, we should bear in mind that state size, that is being micro, small, medium or large state is actually and endogenous variable as states are formed and are able to survive given the appropriate economic, political and social conditions. The elaboration on the state size as the endogenous variable has been promoted by Alesina (2003), since the evidence indicates that the size of the countries is very diverse, that their numbers varied very much throughout the history and also the meaning, functioning and role of the state varies. In this context, what we can observe that after the World War II, in particular, the number of states has increased substantially. In fact, this number has tripled. It can be argued that we are currently living in the era of small states, as more than one third of the existing 215 states around the globe are actually small (see, e.g., Brito, 2015), if we assess the multiple criteria combination. It might be argued, that we are experiencing the area of small states.

Consequently, small state studies has emerged as a discipline, and this discipline has been initially dominated mainly by the issues of vulnerability and a lack of capacities of small states, although these issues have been gradually replaced by the discussions on the potential opportunities of small states, not just their challenges (see, e.g., Thorhallson, 2019). The current theorizing thus focuses also on the specifics of the small economy modeling that has been viable due to the globalization trends (see, e.g., Skilling, 2018; Farrell, 2020), but these trends have been reinforced additionally with the onset of the COVID-19 pandemic, or alternatively labeled the Great Lockdown crisis.

Small versus large states classification uses the size of the country as the main criterion, although this criterion can have several inputs, e.g. number of population, surface, GDP etc., which can be applied also simultaneously. In practice, the number of population usually serves as the main input for classification of states. if the number of population is taken as the main criterion for categorizing states according to the size, the World Bank stipulates that 1.5 million residents is officially threshold for small states, but this threshold is heavily challenged by some due to the population and globalization shifts, where 10 million threshold is taken as more appropriate.

The economics of the state size thus treats it basically as the trade-off between the benefits of the size versus the costs of heterogeneity of population preferences (Alesina et.al., 2005). Namely, the clear benefits of the larger state size are related to larger available domestic market size and thus implicitly less reliance on foreign trade, more diverse industry structure, larger availability of human potential, both in numbers as well as in their diverse capabilities, both also, very importantly, per capita costs of several public goods and services are lower, either because more taxpayers can pay for them, or they have important scale economies or simply because the indivisibility is not implicitly increasing them. Notwithstanding, the aforementioned benefits are mostly economic in their nature, but there are also political and social benefits to the size, like larger military security, larger bargaining power in comparison to other states, larger international role of the state, larger possibility for internal redistribution etc. Since the focus of the paper stands on economic issues, only those are addressed. In contrast, larger countries might experience also some costs that come from the heterogeneity of population, which means
that different preferences should be followed, which increases the costs, like distributional ones, and also the ties that are connecting the people might be looser, which generates difficulties in creating uniform and sustainable policies. Consequently, there is a trade off, and like in any organization, you might have also in the context of the state size the diseconomies of scale, arising mostly through administrative and congestion costs. We might argue that there is some ground also for the theory on the optimal size of state. Nonetheless, we will focus only on the economics of small states.

Economic literature has stressed the relations among the size of the country and governmental interventionism. For example, Alesina and Warcziarg (1998) argue that the size of government correlates negatively with country size and positively with trade openness. They have shown that smaller countries have a larger share of government consumption in GDP, and are more open to trade. Moreover, they argue that these empirical observations are consistent with recent theoretical models explaining country formation and break up. Namely, larger countries can afford to be closed, while small countries face stronger incentives to remain open; conversely, as trade liberalizes, regional and cultural minorities can afford to split because political borders do not identify the size of market.

Similarly, Rodrik (1998) has found a strong positive association between openness and government size. He explains this paradox by arguing that government expenditures are used to provide social insurance against the risk of terms of trade shocks that open economies face. This indicates that government consumption and expenditures play a risk-reducing role in economies exposed to a significant amount of external risk. Goldsmith (1999) has justified the observation on the activist government in small states as being a buffer to vulnerability. Some recent studies have tried to put additional evidence on the relations among state size and government size. For instance, Jetter and Parmeter (2015) have pointed out that economies that are more open not necessarily have bigger governments, but country size may be related to government size, as smaller states should have bigger government, although they admit that using different datasets, timeframes, and sample countries changes conclusions.

This theoretical insight suggest that relationship between state size and governmental interventionism is rather complex issue, and empirical investigations are warranted. If we would follow assumptions stated above, smaller states should have larger governmental spending, on average at least, in comparison to larger states. Given the context, this study would like add to the existing research by providing some additional data-based experimental evidence on the relations among state size and government size. The cross-national comparative investigation based on the data for 44 European countries is utilized to assess the relationships among state size and government size. Specifically, we focus on the two categories of governmental spending, i.e. consumption spending and spending on transfers and subsidies, which are the two main categories of governmental spending.

Since this is explorative study, 44 European countries are split into two main clusters. The first cluster consists of smaller states, which are those that have less than 10 million residents; the second cluster consists of states that have more than 10 million residents, and we consider them as larger states. Thus, we avoid speaking directly of small states due to the issues related to the problematic spectrum of medium-sized states, but rather split, given the European context, states into two clusters, the ones below and the ones above 10 million residents.

Given the focus of the paper, we analyze the available data for 2009-10 and 2017-18 time periods, in order to inspect the potential variations related to the different global economic conditions, as the first period corresponds to the period of Great Recession, and the second for the period of global economic prosperity. Since the data on the fiscal records for the Great Lockdown period are not available yet, we test the assumptions taking from the data of the last global economic downturn in order to enable projections on the fiscal impacts of the current crisis in smaller and larger states.

RESULTS AND DISCUSSION

Table 1 presents the outputs on the groupings of states into two size clusters. Although the states analyzed are all very diverse, it is evident that the size variable obviously does not play a role in influencing the extent of governmental expenditures, which is not in line with theoretical predictions, in particular for the governmental consumption spending. Moreover, it is also evident that actually smaller states have, on average, lower share of governmental transfer spending in GDP, and this holds irrespectively of the time-periods under consideration. This is further reinforced, if the statistical analysis is performed, i.e., two-sample t-test assuming unequal variances, where the later empirical finding has been supported further (see Table 2 below).
### Table 1. Evidence on the extent of budgetary part of government for selected European countries

<table>
<thead>
<tr>
<th>State/Indicator</th>
<th>2017-18</th>
<th>2009-10</th>
<th>2017-18</th>
<th>2009-10</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Gov't consumption expenditure % of GDP</td>
<td>Gov't transfer expenditure % of GDP</td>
<td>Gov't consumption expenditure % of GDP</td>
<td>Gov't transfer expenditure % of GDP</td>
</tr>
<tr>
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<td>7.99</td>
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<td>15.74</td>
<td>16.63</td>
<td>21.51</td>
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</table>

Sources: EFW (2010 and 2018), own calculations.

Nevertheless, it is evident that during the economic downturn period, governmental spending relatively increases, which is something that is expected due to the role of the so-called automatic fiscal stabilizers that majority of countries tend to have in-built into their fiscal policies. However, we cannot make statement that economic conditions change the structure of spending when smaller and larger states are compared, although variability of transfer expenditures is a little bit more explicit in smaller states, which partially corresponds to the assumptions derived from the existing literature. Namely, this tends to suggest that during the economic boom, smaller states are better off, and they consequently have fewer social problems on average, but this problem relatively enlarges during the economic downturn.
Table 2. Testing the sample means of budgetary categories for smaller and larger states

<table>
<thead>
<tr>
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<td>Transfer spending</td>
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<td>0.287151</td>
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<td>1.695519</td>
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<td>1.69236</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.875411</td>
<td>0.007326</td>
<td>0.574302</td>
<td>0.018033</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.021075</td>
<td>2.039513</td>
<td>2.028094</td>
<td>2.034515</td>
</tr>
</tbody>
</table>

Sources: own calculations based on the data from Table 1.

To finalize, the results of the study suggest that the effect of the size of the country does not necessary favor larger countries in respect to the smaller size of government due to the potential scale economies, but variations in transfer spending suggest a little larger vulnerability and exposure of smaller states to external economic shocks. In this context, it becomes of interest to study further the role of innovations in public services that enable the reductions in costs. Furthermore, it is evident that not the vulnerability plays a major role, but diversity in preferences might be more important for the volume of transfer spending, and this might justify relatively larger transfer spending observed in larger states, if we seek the explanations in the existing literature.

CONCLUSION

The Great Lockdown, caused by the recent declaration of COVID-19 pandemic, has caused severe economic distortions to the majority of world countries. From the global perspective, a significant contraction in foreign direct investments and international trade has occurred, to some extent accompanied by the rising pressures for economic nationalism. According to the perceived larger openness and vulnerability of smaller states, it is thus expected that those countries ought to be hit much harder by the economic contraction, as their outputs are much more volatile in relation to the economic cycles. In this context, this paper intends to investigate the exposure of European states to the current lockdown, where the focus is particularly on assessing the potential fiscal impacts of the lockdown, deriving from the existing evidence steaming from similar situations in the past.

The results of the study suggest that the effect of the size of the state does not affect the consumption spending of government, as the diseconomies of scale might be offset by larger innovations in public services that increase the efficiency of their delivery. In contrast, for the transfer expenditures size variable matters, but the major impact does not stem from the external exposure and shocks, but from the advantage of smaller states, that, at least on average, originates from the ability to utilize the benefits of more uniform population preferences. This is reflected in relatively lower levels of transfer spending of government in GDP, but the effect of volatility related to economic conditions can still be observed. Consequently, this research adds to the development of the discipline of small state studies, in particular to the issue of their vulnerability and changing global economic environment.

ACKNOWLEDGEMENT

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REFERENCES


THE EDUCATIONAL UTILITY OF A MASSIVE MULTI-PLAYER, REAL-TIME STRATEGY WAR GAME: A RETROSPECTIVE CASE STUDY

Janse van Rensburg

Abstract:
The educational utility of simulations and gamification are well documented within the literature, whereas massive multi-player, real-time strategy war games (MPRTS) are relatively unexplored. This paper explores through a retrospective case study, the educational utility of an MPRTS war game in the context of leadership, business strategy and social behavior development. The chosen MPRTS is one of the latest offerings on mobile devices. Specific missions and goals are facilitated through the MPRTS platform. To achieve these goals players need to collect their own resources; form alliances and build their own cities; and collaborate and coordinate their efforts within their alliance. The social interaction between players of different nationalities, cultures and languages, presents interesting phenomena that is also explored within this paper as part of the findings. This paper concludes with an argument that games such as MPRTS, do present educational utility for business and entrepreneurship students in strategy and entrepreneurial leadership. Specific recommendations are provided on how such an MPRTS war game primarily intended for leisure may be utilized, to develop leadership, strategic decision-making ability and entrepreneurial self-efficacy as an alternative to simulations and other gamification initiatives.

Keywords: entrepreneur; leadership; gamification; strategy

INTRODUCTION

Since the 1980s the benefit of games and game-based learning initiatives were investigated (Deterding et al., 2011). Duy (2018) argued that creating an engaging online training tool that holds attention and engagement sufficiently long enough to impart the training has shown to be a considerable challenge and that game based elements can potentially increase engagement and attention. Dragoni et al (2014) concluded that it may be possible to develop leaders via experience, whereas the author postulates that this experience could also be facilitated during game play. Simulations and educational games often presents limited scenarios, and therefore training with these games are a one shot affair. Attempting such games a second time would have diminishing returns as the challenges and decisions are already known. Games that are normally intended for leisure and not formal educational development have many more decision paths, that exhausting them would be difficult (Lisk et al., 2012). MPRTS players spend significant amount of time on MPRTS games, and research to understand their motivation, behaviour and in game experience is relatively unexplored (Mora-Cantallops & Sicilia, 2018). Additionally, the educational utility of leisure and educational games are inconclusive (Duy, 2018; Young et al., 2012), however many educators are already utilising game based learning initiatives (Young et al., 2012). Whereas, MPRTS games can be a useful tool to bring together the world of leisure or video games and reality. For example, it is also fascinating that temporary teams are formed by strangers to fulfil a relatively complex task in a very short time across the globe in a virtual reality (Mora-Cantallops & Sicilia, 2018).

LITERATURE REVIEW

Mora-Cantallops and Sicilia (2018) concluded that educational utility within MPRTS are relatively unexplored, and that several areas, including the areas explored within this study needs further exploration. This brief literature review will first explore the nature of education and gamification versus leisure games such as MPRTS type games, and then explore the potential developmental dimensions that this paper will report on, namely: Entrepreneurial Self-Efficacy, Strategic thinking and Leadership.

Educational Gamification vs Leisure Games

Figure 5 presents four game classifications that was proposed by Duy (2018), namely gamification, serious games, gameful design and games. Duy further argued that games with a purpose can have educational value. Since 2008 the educational value and various design elements that engages players was investigated by several researchers (Duy, 2018; Kapp, 2012). An MPRTS game would be classified as a game which is aimed at fun and gameplay, however should it have educational utility, then it could be reclassified as a serious game.

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Three core competencies were identified by the author that the MPRTS could develop. These competencies are: strategic thinking, entrepreneurial self-efficacy and leadership. These competencies will be explored under each heading.

**Entrepreneurial Self-Efficacy**

Developing an entrepreneurial aptitude had been well researched prominently through the cultivation of entrepreneurial self-efficacy. Researchers from various perspectives defined entrepreneurial self-efficacy as the self-confidence of entrepreneurs regarding specific tasks (Baron & Markman, Gideon D, 1999; Baum et al., 2001; Boyd & Vozikis, 1994), which can lead to entrepreneurial intention. Various studies have been conducted to measure the degree to which interventions such as courses influence entrepreneurial self-efficacy (Neergaard & Krueger, 2012).

Neergaard and Krueger (2012) proposed that children can cultivate their self-efficacy when they participate in competitive sports as it develops the aptitude to constantly better oneself and to endure hardship, and to learn more about oneself with regards to the amount of pressure one can cope with. From a contextual dimension, competitive sport activities can improve perceptions and interpretations of environmental uncertainty which facilitate the development of coping strategies in the entrepreneurial competitive arena. Mauer, Neergaard and Kirketerp Linstad (2009), noted that it is not possible to instil instant changes in individuals when it comes to self-efficacy. However it is possible that self-efficacy declines after an intervention, since the intervention may have revealed the complexities or certain undesirable insights that the participant was unaware of before the time (Leonard et al., 2016). This leads to the second proposition of this study.

**Proposition 1**: MPRTS have Entrepreneurial Self-Efficacy developmental utility.

**Leadership**

The concept of using games and simulations to develop leadership capabilities are not new. Since 2002, the United States Military sponsored the development of a game, namely Full Spectrum Warrior to train their squad leaders and future soldiers. Kravis Leadership Institute designed and run experiments for participants to explore leadership development on leisure games as well as simulations (Lisk et al., 2012). A study on the development of strategic thinking of leaders through global experience concluded that global work experiences positively relates to the leaders’ strategic thinking competency (Dragoni et al., 2014). Playing an online game may not be related to work experience, however it may relate to the ability to work with people of different cultures around the world. Leadership development can involve a number of interventions. One such intervention is to develop social competence, and by enhancing one’s network. This practice can assist with the development of the necessary social skills for leaders. The shaping of one’s own social network and professional networks it is possible to build a network-enhancing leadership development context (Cullen-Lester et al., 2017). Leadership skills and behaviours that influences the success of leaders by their subordinates are the ability to motivate others, and to communicate appropriately, and critical behaviours to develop are treating followers as unique individuals and encouraging teamwork and collaboration (Holt et al., 2018). Dragoni et al. (2014) suggested that strategic thinking is a critical leadership competency. Holt et al. (2018) additionally noted that classroom instruction, online training and experiential learning can be used to develop leaders, whereas Nuangjumrong (2014) found that certain leadership styles can be developed during gameplay subject to the role of the player in the respective game.
The leadership constructs that will be analysed therefore would be the ability to motivate others, communicate appropriately as well as the ability to train others. Strategic Thinking ability is a critical leadership skill, and is therefore explored within more detail under its own heading.

**Proposition 2: MPRTS have Leadership developmental utility**

**Strategic Thinking**

Although various models of strategic thinking development exist, this research will be based on the 15 concepts of strategic thinking (Sandelands & Singh, 2017). Strategic thinking can be measured by identifying the behavioural patterns such as, visioning, environmental awareness, assessment and evaluation, strategy creation, plan development, implementation and alignment (Goldman & Scott, 2016). The table below defines each strategic thinking concept that was identified by Sandelands and Singh (2017).

<table>
<thead>
<tr>
<th>Core Concept</th>
<th>General Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary</td>
<td>“Individuals who convey a sense of direction, and provide a focus for all activities in an organisational context” (Bonn, 2005, p. 339)</td>
</tr>
<tr>
<td>Analytical</td>
<td>“Demonstrating a logical, reason-based approach”</td>
</tr>
<tr>
<td>Intuitive</td>
<td>“The ability to react instinctively” (Olson &amp; Simerson, 2015)</td>
</tr>
<tr>
<td>Creative</td>
<td>“Searching for new approaches and envisioning a better way of doing things” (Bonn, 2005, p. 338)</td>
</tr>
<tr>
<td>Synthetic</td>
<td>“Refers to the ability to synthesize (blend) ideas, information, or processes”</td>
</tr>
<tr>
<td>Conceptual</td>
<td>“Forming ideas or concepts to provide answers to experiences, observations etc.”</td>
</tr>
<tr>
<td>Divergent</td>
<td>“The ability to think in a different manner or ways”</td>
</tr>
<tr>
<td>Systematic</td>
<td>“An ability to examine how different concerns are connected, affect, and influence one another” (Liedtka, 1998)</td>
</tr>
<tr>
<td>Flexible</td>
<td>“Displaying adaptability, able to handle change”</td>
</tr>
<tr>
<td>Context Oriented</td>
<td>“The ability to think in a different manner or ways” (Bonn, 2005)</td>
</tr>
<tr>
<td>Future Oriented</td>
<td>“Being forward thinking”</td>
</tr>
<tr>
<td>Process Oriented</td>
<td>“Cognitive activities demonstrative of self-awareness, and awareness of wider environment” (Olson &amp; Simerson, 2015)</td>
</tr>
<tr>
<td>Integrative</td>
<td>“The ability to combine concepts, thoughts, or ideas”</td>
</tr>
<tr>
<td>Holistic</td>
<td>“Realisation that a scenario must be viewed as a whole rather than within separate parts” (Kaufman, 1992)</td>
</tr>
<tr>
<td>Reflective</td>
<td>“An ability to draw upon and learn from past experiences”</td>
</tr>
</tbody>
</table>

This paper will consider the above strategic thinking concepts based on the experiences of the researcher in the MPRTS game.

**Proposition 3: MPRTS have Strategic Thinking developmental utility**

**EDUCATIONAL UTILITY OF MPRTS**

Leisure games may not have been originally developed with the aim to develop the behaviours and real world skills of its players. It is therefore possible that certain undesirable effects may result from leisure game play (Lisk et al., 2012). The author is of the view that an analysis of leisure games should incorporate a reflection on any potential undesirable effects.

However, it is argued by the author that interaction with the respective MPRTS can yield educational utility with regards to strategic, entrepreneurial and leadership behaviour as a potential unintended consequence by the game designers. The quality and accuracy of how the MPRTS mimics real life decisions that gets moderated over time
may also influence the educational utility and will be included in the conclusion section. If the educational utility of MPRTS is effective and efficient then a similar approach to gamifying educational programmes in entrepreneurship, strategy and leadership can be explored.

RESEARCH METHOD

The author used a qualitative retrospective case study approach (Yin, 2017) to study the educational utility of the MPRTS. The author played the MPRTS over a period of six months, logging in and engaging at least once per day. A focused literature review guided the reflective review of the actual experience of the author within the game. This secondary data was matched with specific events that may have provided educational utility, as well as to align the educational outcomes of the game to established theories in strategy, entrepreneurship and leadership. The author then matched the theories with the in-game experiences. This analysis then provided a basis for the conclusions made by the author.

FINDINGS

The findings is a retrospective reflection by the author of the game: Rise of Empires which is a mobile MPRTS game intended for leisure. The author first played the game in December 2019, and within the first week of his engagement realised that interesting educational utility might be present.

GAME STORY AND CONTEXT

The ROE game story is a warlike game between players around the world from all walks of life. The player takes on the role of a leader of a small town that was devastated by the invasion of the Eastern Dynasty, and needs to rebuild their empire from its ruins. To do this, they have to build their town from scratch, recruit legendary heroes and join an alliance within their state. The game has various unique features, such as: a) Real-time combat between players across the world, b) realistic graphics, which includes maps, heroes and attack units, c) freedom to build and upgrade various buildings, research technologies, train troops, and recruit powerful heroes, d) interact with other players socially and strategically to accomplish missions designed by the game developers.

GAME MECHANICS

ROE has a complex set of game mechanics, which will take an average engaged player several months to learn. This includes the heroes system, technology research system, as well as the ever changing and dynamic gaming environment. These game mechanics works together to give the player an opportunity to enhance their tactical advantages over time uniquely to other players.

REFLECTION AND GAMING EXPERIENCES

I reflected upon my experiences during the entire duration of gameplay. What I have found fascinating was the dynamics that I have experienced once I have joined an alliance. The alliance leaders welcomed me, and I started to learn more about the game and gameplay from them. Already during the early days, I realised that there are more to this game than simply fun. The seriousness at which participants took the game and events in the game was very interesting. Herewith some highlights of my experiences within the game.

Player Autonomy

It was interesting to see that the players would make their own rules on how the game should be played, and if one of those rules were broken, then the leaders would penalise the player. One such rule was that no player was allowed to attack another player from the top 20 alliances in their state. They called this the NAP20 rule. This was to allow them to develop their own castles to be strong enough for the state versus state challenge. Some players got bored and then started random attacks. Alliances acted together to counter attack such players until they eventually quit the game. The penalisation for breaking the rule would mean that your alliance could be banned from the top 20 alliances if the leader do not act against such member. Penalties would include that the alliance would not protect the player and that a player from another alliance can attack the player. This would result in a significant loss of resources for the player. The ultimate penalty would be that the player removed from the alliance and was not allowed back in the top 20 alliances. The rules was often determined democratically between the leaders of the top alliances.

For example, one specific player had gone rogue and would share state secrets to other states during challenges with those states, like location of vulnerable targets. This meant that those states could gain points faster. At first, the state alliances would spend a lot of time on the rogue player, and the more they raised their issue with them, in
often rude terms, the more the player would repeat the rogue actions. The rogue player also tried to recruit other members in their own alliance to become powerful, and content as a top alliance. This never happened. It was not until one of the alliance leaders indicated to the state that it might be better just to ignore the rogue player, as the rogue player should get bored and quit. This approach was tried and then the rogue player disappeared.

**Leadership Struggles**

At one stage I was one of the co-leaders of an alliance as Rank 4 member. Rank 5 member being the highest rank. We had to recruit members to our alliance and remain in the top 10 with regards to power ranking. Currently this alliance is Ranked #1 alliance consistently. Even though there was competition between alliances, this was managed between the alliance leaders. I had first-hand insights into many of these discussions. The game runs on a master schedule that is aimed to both develop and keep the game interesting to their players. The schedule introduces new events and challenges. One of the first big events was the Kill Event. This meant that players within a state would get points if they would attack other castles from other alliances. This caused a week long debate amongst leaders of the top 20 alliances on whether to temporarily suspend their NAP20 rule. The Kill Event would start the Saturday, and on Thursday there was still no agreement between the leaders. Due to indecision, this had harmed the trust between the leaders and their alliance members, and in some cases permanently. This created leadership challenges for each of the alliance leaders. The strongest alliance (Alliance A) at the time had collapsed due to this. The leader, who is of Turkish descent, had a very dictator leadership style, whereas our leader (Alliance B), who is from Britain, had a laissez faire leadership style. Leader of Alliance B indicated his personal preference for the decision, and said that he will go with what they decide. That is what he communicated to both the state leadership, of which he was a member, and the alliance he leads. Members asked him what all of this meant, and he explained that if there was a war, then they need to prepare themselves by having sufficient medical tents, medical research and shields. The leader of Alliance A indicated to the alliance leaders his alliance is not ready for a war and that the NAP20 rule should remain. The leader of Alliance C decided that this state will become weak if they do not have a war to practice combat skills and indicated that he supports a suspension of NAP20. He had put the matter to a vote, and the vote turned out to keep NAP20 in place.

Leader of Alliance A communicated to their members that NAP20 rule remains, whilst Alliance C was preparing for war. Both Alliance A and B, and the remainder of alliance thought there would be no war. This meant they would not shield thus would be unprepared. This had tested the relationship that the leader of Alliance A had with his followers. His alliance, which was 100 members strong eventually disappeared as members left for other alliances. A few months later, leader of Alliance B realised he do not have sufficient skills to lead the players in his alliance, and orchestrated a merger with another strong alliance to become the Top #1 alliance of the state. The other alliance was ranked about three positions lower than Alliance B was ranked at the time. Together they would become second in ranking. The culture of the other alliance was similar and the merger was simple, but not without repercussions. As part of his negotiations he handed over power to his alliance to the other player. The new leader is from New Zealand and more visionary who managed to unite the entire state and all alliances within the state. This he could do as he was part of a stronger alliance. He would also develop players from weaker alliances, and promote and demote players based on their developmental progress between weaker and stronger alliances. He also adapts his style over time, depending on the situation, as well as stepping down from his leadership role when he is not able to commit time to the game, and to return when he is again able to proceed with his leadership commitments.

**Strategic Thinking**

The game has several warlike events that you need to participate in to advance and develop in the game. One such event is the Reign of Chaos event. An alliance from a specific state declares war against an alliance from another state. They would then have two teams each, a defending team and an attaching team. Attacking teams would then port to the state they attack and needs to destroy one of the alliance centres of the enemy. The defending team would remain at the home base, to defend the alliance centre. The leader has to coordinate both teams. To attack an alliance centre, the attacking team do so by creating a path to the alliance centre by physically occupying land and destroying enemy structures. The enemy will then defend by winning back the land and re-occupying it and preventing you to advance to their alliance centre. With this event the leaders of the respective alliances needs to coordinate, and ensure the availability of their alliance members. Timezones is a challenge because the enemy can declare war at a time when most active alliance members are sleeping. Leaders can also call upon the assistance of any other alliance to assist with defence. This also requires that leaders properly communicate the strategy with the other alliance members and even other alliances before the war begins. When the alliance fails with a specific strategy, this could reflect negatively on how the leader is viewed by their alliance members. One such event was after Alliance B lost at such an event. The leader was not defensive, but assisted the process for each member in the alliance on what they had learned from the event. A new idea was
developed for the next war to counter the enemy with a similar attack strategy. An example of this was to make special spots as close as possible to the alliance centre to position the castles of defenders. This would then reduce the time for the defending player to send out troops to hold ground and to delay the enemy significantly to advance to the alliance centre. This is now a fixed defending pattern in the strategy for the alliance. This came about through a reflective discussion within the alliance between the members, as facilitated by the leader.

Entrepreneurship

Even though the game in itself does not consist of entrepreneurial activities, this is a feature that was observed outside of gameplay itself. Due to the significant time it takes to develop game assets, these assets often becomes valuable to players. Players often have several accounts to advance the development of their primary assets by transferring resources from other assets. Since it is time consuming to develop an asset, some players resorted to purchasing the assets from other players. For example, at the time of writing this paper, the accounts of players would become worth anything between $20 and $2200 as listed on one of the websites that facilitates the sale of game assets (Rise of Empires Accounts - Buy Sell Trade, 2020).

CONCLUSIONS

Due to the competitive nature of the game it could be possible to develop entrepreneurial self-efficacy as proposed by Neergaard and Krueger (2012). The game itself may not develop entrepreneurial aptitude other than leadership and entrepreneurial self-efficacy. The author therefore are of the view that self-efficacy is being developed, but the degree thereof might be limited. This means that such a MPRTS may not be the most efficient means of developing entrepreneurial self-efficacy. Thus, an MPRTS may have some Entrepreneurial Self-Efficacy developmental utility.

The leadership challenges experienced by some leaders would indicate that leadership capabilities are being developed through gameplay. However this could be limited based on whether the player occupies a leadership role. The leadership roles are also determined between players. Natural leaders would step-up and become a leader. Thus it appeared to the author that those with leadership capabilities would be open to a leadership role, whereas those who wish to be a follower would not volunteer to be a leader. As the game progressed, the leaders have earned their positions and followers seems to shy away from leadership positions. This means that they would never develop leadership skills through playing MPRTS games. Thus leadership of leaders are developed whereas the leadership skills for other players are not.

Strategic thinking skills through reflection may be developed if the leader of the alliance would facilitate this process. If not, then the followers would not have insights into the events and what would be a better way to do so. It can therefore further be concluded that not all players would benefit from the development of strategic thinking skills.

The addictive nature and the free engagement between the different players of all walks of life might not be an ideal situation to facilitate and socialise desired behaviours. It is therefore possible that undesirable behaviours can be learned, especially amongst unsupervised children.

Limitations of the study and Future Research

MPRTS games may provide an excellent platform for interpersonal development, and may be useful to those who becomes leaders within the game and engage. It is with these insights that a facilitated game or simulation may have a unique strength over MPRTS or leisure games, as the gameplay is facilitated to equally teach the desired outcomes. However, for some players who are natural followers, their ability to support their leader is developed, whereas the leaders have a virtual life to experience their leadership capabilities without real life consequences. In that respect, MPRTS might be a great platform for leadership experiential development.

Since this research was able to provide insights not available in similar quantitative studies, a single person account of events cannot be generalised. Future research can however be directed at expanding to quantitative pre- and post-tests, to test the generalisability of the respective phenomena observed in this study, however this in depth analysis clearly indicates that the role (leader or follower) the player takes on in the longer term within the game needs to be established within quantitative studies, as this could contaminate the results of such research studies.

REFERENCES


CURRENT TRENDS AND OUTLOOKS IN ENERGETIC BUSINESS
Pavel Sedláček 1

Abstract:
Aim of this paper is to present current trend in energetics and its advantages and disadvantages. The paper assesses virtual batteries, electromobility, solar energy tradeable certificates, smart grids, local distribution markets regulations and its impact on companies in this business as well as on the market itself. It also covers current government regulations due to COVID-19 and its impact. Furthermore the paper offers predictions and outlooks in the field of energetics and chosen energy commodity exchange markets.

Keywords: electricity, business, electromobility

This article reveals future possible progress in energetics, current changes and trends, that emerged at the market recently.

SMART GRIDS AND DECENTRALIZATION OF ELECTRICITY PRODUCTION

Most important trend changing energetics is decentralization – gradual transfer of electricity production to decentralized power plants, typically small photovoltaic or wind power plants, cogeneration units, biogas plants, possibly also supplemented with accumulators. When looking to the future there is also discussed small hydrogen power plants. More decentralized production approach brings diminishing transmission losses, trends is accompanied by emerging smart grid system, ensuring more accurate management of electricity resources and higher efficiency of transmission systems. In more distant future, it is possible to get a sufficient production and storage system that will enable to disconnect from the distribution network. Households can then decide not to pay monthly fees for network usage and disconnect from the network. The costs of operation of current distribution network will remain the same, which results in transferring total costs to all remaining (connected) entities. Rising distribution prices may motivate other subjects to become disconnected from the energy grid which may be a vicious circle.

ELECTROMOBILITY

Another current trend is electromobility. Funds from the European Union through the OP PIK program promise companies support of 20–40 %. This starts to attract besides luxury Tesla owners and environmental enthusiasts an increasing part of the population. Nevertheless there are only around 2,000 electro cars currently registered in Czech republic.66

Calculations indicate the price of electricity consumed vs. the price of gasoline consumed per 100 km, however, the fees for electricity distributor that will occur after purchase of electro car, if the owner wants to use quick chargers.
An example of cost and savings tied with purchasing an electric car can be calculated hereinafter. The owner of an electric car commutes daily to work distant 10 km, i.e. 20 km on weekdays, so it is about 400 km per month. He travels another 300 km per month on trips around the area. He charges at home for a price of around 4,7 CZK/kWh (0,18 €/kWh). Calculating charging for a 52 kWh battery (meaning distance of 395 km – a specific vehicle is calculated in the middle of the range of battery options and range)67, so one battery charge costs 244 CZK (6,67 €), therefore 0,62 CZK/km. In addition, the owner takes the car once a year on holiday trip (about 1.000 km). When the car is taken on longer routes, it will be recharged at fast-charging motorway stations for a price of around 10 CZK/kWh (0,38 €), i.e. 1.31 CZK/km.
For comparison, if we calculate a car with a regular diesel engine, consumption of 5,5/100 km and the current price of petrol fuel of CZK 25/litre, the costs 1,37 CZK/km, i.e. similarly. In addition, for the possibility of recharging within about 3 hours (depending on the type of car) it is necessary to have another fast-charging point at the house. It comes with necessary increase of the value of circuit breaker by 16-32A (depending on the type and speed of the charger) and thus raising the monthly fee to the distributor for increasing the circuit breaker. In the case of an increase of 32A, the amount corresponds to 120 CZK/month (4,51 €), or 180 CZK (6,77 €) in case of newly emerged place (another distribution tariff). The newly emerged place also comes with a connection fee of 8,000 CZK (500*16A), 1,200 CZK for revision and 12,500 CZK for new electric box. Upgrading an existing circuit breaker involves similar costs, only without the need to buy a new box.

1 Slovak University of Agriculture in Nitra, Slovakia
67 For example Renault Zoe
Monthly payments for increasing the circuit breaker can be avoided only if you accept the charging time of 13 hours. However, even in this scenario it is not possible to use simultaneously pool heating, higher consumption such as oven etc. - the circuit breaker would fail. This would result again in consideration of investment to separate consumption point (so that the circuit breaker does not fail and the rest of consumption can be in current cheaper tariff. It is therefore clear that this will always be on an individual assessment and mostly will result in increase in the value of the circuit breaker and fixed monthly distribution payments, which is also the reason why companies in energy business support this direction.

An overview of costs calculated above in one year is shown in the table below. For completeness, it is necessary to mention that you can count on a lower price for service (electric motor has a much lower failure rate than diesel engines), and currently valid benefits for electric cars (cheaper compulsory insurance, no need for highway tolls, free parking in some cities). Whether these benefits will continue to apply in the future when the number of electric cars increases is not guaranteed, and even if they were, when there is a certain number of these vehicles they have to be reconsidered and any guarantee may end as purchase price guarantee for photovoltaic power plants in 2010 in Czech Republic.

On the other hand, in addition to a significantly higher purchase price, the disadvantages of electro car are also limited durability and declining battery capacity (battery replacement is very expensive, sometimes even not yet offered as an option). Also discomfort of need to constantly monitor the distance and the nearest possibility of recharging and longer waiting at charging stations.

<table>
<thead>
<tr>
<th></th>
<th>Electric engine</th>
<th>Diesel engine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>per unit</td>
<td>units</td>
</tr>
<tr>
<td>circuit breaker</td>
<td>76</td>
<td>monthly</td>
</tr>
<tr>
<td>travels around home</td>
<td>0,62</td>
<td>700 km</td>
</tr>
<tr>
<td>travels far from home</td>
<td>1,31</td>
<td>1 000 km</td>
</tr>
<tr>
<td>tolls</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>damage liability</td>
<td>1 000</td>
<td>1</td>
</tr>
<tr>
<td>Total yearly costs</td>
<td>7 996</td>
<td></td>
</tr>
</tbody>
</table>

The difference in annual costs is less than 7,000 CZK/year (263,2 €). Advantages and disadvantages such as more frequent servicing of diesel engine, limited battery capacity and durability and free parking in “blue zones” etc. were not taken into account due to difficult quantification. The price difference of the same car with a diesel engine and an electric motor can be calculated about 500.000 CZK for an electric car sold for 910.000 CZK, so this additional investment would return on savings in 70 years (600.000 km). If the car was bought by a legal entity using an EU subsidy the final price of the electric car without VAT is 443.000 CZK. The subsidy of 20–40 % would be calculated from the amount without VAT (750.000 CZK), i.e. the subsidy of 300.000 CZK.

The difference for small companies (with the highest subsidy) compared to the same car with diesel engine is 105.000 CZK. If the owner buys an electric car from the illustrative example for a company using a subsidy, the return on investment will be around 15 years, which is still below time frame, for which people buy cars, or invest.

From the above is clear that without the subsidy titles, electric cars would not have found many supporters. Whether the subsidies are reasonable is questioned and economically compared to the excessive support of photovoltaic power plants in the past. It is also not true to say that if electricity is produced from the PV on the roof of a house, charging a car is environmentally friendly. When the roof is oriented to the south, usual possible installation of PV plants is up to 5 kWp, but 10 kW is needed for recharging. This means 5 kW is taken from the grid, but the sun produces 5 kW only at noon in clear weather and then the performance of the panels decreases rapidly. Thus, even in the summer, when it is lit for the longest time, it is not possible to ensure the consumption of the electric car is from the PV plant and the network must be dimensioned so that it can meet the load throughout the year even without the PV plant. In addition, cars are typically recharged at night, so the electricity consumed is not ecological (although a certificate of green origin can be obtained).

The issue from the perspective of the distribution company and the future of energy is also debatable and uncertain. Distribution companies support this trend, they probably do not yet believe in the big boom in electric cars and have a positive perception of all customers with electric cars, who pay increased distribution fees. However, if the visions of politicians is fulfilled and every second electric car is owned, in a street with 50 houses the load on the network would increase by 190 kW in the evening, if 10 % of owners choose fast charging, it would be about 400 kW. There is a high probability that most cars will be recharged in the evening. This means that each such street
will require a new transformer substation - ie an investment of approximately CZK 1 million. In addition to the transformer station, it would be necessary to strengthen the line - the existing cable (best case scenario 185 mm²) can handle about 350 A, so more cables is needed to be laid down, which involves additional investment and dug up sidewalks and roads, and also likely change in networking. These costs will again be reflected in distribution prices and the return on the electric car will be shifted again. Any fault would require immediate repair without the possibility of reconnection (longer blackouts), or legislation would have to allow car consumption to be disconnected for the duration of the fault repair. Multiplying the number of transformer substation in places where cars are connected in this way means further significant costs, but also further land acquisition (sometimes not realistic), and last but not least energy-intensive production of transformer substations itself and cables, their transport and they laying down. This comes again with a significant carbon footprint per electric car, but these studies do not take into account any studies on environmental benefits. Decisions are made based on incomplete information. In the UK this problem is known and discussed. There is a discussion about subsidies for distribution companies to help companies cope with the trend of electromobility.

If more car owners are not satisfied with recharging for 8-14 hours and choose the option of fast charging (in 30 minutes 80 % charge), then this scenario will simply occur. Distributors will quickly find themselves in a situation where they will have to reject additional new supply points and increase on power consumption at existing locations. This situation has already occurred in the past in year 2010, based on an agreement with the ERÚ (Czech energetic bureau) and distributors refused (often unjustifiably) the connection of any PV plant. This took 2 years. In this case, the distributors purposefully violated the legislation with the consent of the ERÚ, but with the increase in power consumption, the reality would be that the networks would not really allow further connections and suspending the increase would be the only solution. This situation with no possibility to increase power consumption and connect new metering points such as a new bakery, repair shop etc. has a direct impact on the economy. Unfortunately, no one talks about it and everyone only quietly waits for the problem to arise. In the moment, when state-subsidized cars are already in the garages and this difficult problem arises, the government is unlikely to keep its word, as it happened with photovoltaic plants in 2010, when investors investing under state guarantees have been deceived by the state. In recent emergency state of Covid-19 Czech government approved a maximal yield of 6.3% in order to obtain funds promised to investors by state guarantees.66

GREEN ENERGY CERTIFICATES

I would also like to mention recently introduced green energy certificates. Last year, the share of electricity produced by renewable sources in the Czech Republic was less than 13% (wind 0.8%, water 2.2%, biomass 2.9%, solar 3.2%, biogas 3.5%)69

This electricity ended up in portfolios depending on which Subject of Settlement70 was contracted. The market operator then evaluated the proportion of renewable sources that appeared in the individual portfolios, and the customer could find this percentage from renewable resources in portfolio on his invoice. Recently, the possibility of green energy certificates trading has started. The owner of a renewable energy power plant can now obtain so called “green certification” for the produced electricity for fee of 0.05 €/MWh and a monthly fee of 4 €. This certificate can be subsequently sold for a higher value to the trader (another fee 0.02 €/MWh per transfer) and thus can be this certified electricity sold to final customers willing to pay extra for certified green electricity. These certificates are available for purchase on a small exchange market at a price of around 0.4 €/MWh.71 So the situation has not changed compared to the past, it is still the exactly same representation in the composition of electricity, no new renewable power plants have been added due to the introduction of this certification, only the government will earn for each certified MWh, paid by the customer together with the trader’s surcharge for exclusivity and VAT (also government income). Some institutions such as Masaryk University are proud that their electricity consumption is green, but this only means they bought certificates. But it is not that way in reality and it also means, that by exactly their volume will be “less green” electricity of other consumption points in the portfolio of traders and nothing was done for ecology, only the government got money out of nothing and a new bureaucracy was introduced.

VIRTUAL BATTERIES

Another currently popular term that some companies has recently come up with. This product offers to store unused produced energy during the day (typically PV on the roofs of houses, unused when the sun shines the most) and consume it at night or on another day.

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69 ČEPS: Data [online]. 6.5.2020 [cit. 2020-05-06]. Available at: https://www.ceps.cz/cs/data
70 electricity traders that compensate portfolio imbalances - production and consumption
Overflows supplied to the network are completely unpredictable and dependent on the weather, on the holidays of roof owners (in case the household increases consumption, it consumes overflows) and therefore they are usually valued significantly lower than the price from the grid. The purchase of overflows from these suppliers ranges from 200 to 300 CZK vs. the price of electricity consumed from the network 1400 CZK. To level up this phenomenon, this innovative product was introduced, operating on a purely bureaucratic principle, although seemingly reminiscent of the operation of real batteries - overflows are "stored in the network" and consumed at the time of consumption from the network. A fee of approximately CZK 590 per 1 MWh is paid for this “paper-stored” electricity service. The price for this service depends on the offer of the supplier. The customer who arranges this product is supplied with electricity at night (usually a cheaper off-peak product) "free" compared to the overflow to the grid (over noon at peak product). The price of electricity taken from the grid is at the rate of D02d 1.300–1.700 CZK/MWh, at the two-tariff D25d a high tariff of 1.500–2.200 CZK/MWh and at 1.150–1.250 CZK/MWh a low tariff (range again according to the supplier's choice).

Therefore, if the overflow to the grid is 1.5 MWh, option A is to receive 450 CZK for the purchase, option B to buy 2 MWh for a fee of 1.180 CZK (it is not possible to buy the product for smaller units than 1 MWh) with the option to consume "previously produced electricity". If the electricity is consumed in a low tariff, the price difference is 1.5 x 1.150 – 1.180 is 545 CZK. In both cases, a distribution fee is paid for the use of the network (production plus consumption). The difference in prices is negligible, it may or may not pay off with difference of few CZK.

Cashflow option A: 1.5 * -300 + 1.5 * 1,200 = +1,350
Cashflow option B: 2*590 (fee) = +1,180

In this case, the household will save 170, -. but it is a decision of the prices of the trader and the specific exact value of the overflow produced.

**ENERGY MARKET**

When having a closer look at the energy market, after the liberalization of electricity and gas trading in 2002–2007, competing companies gradually increased, but currently is to be observed the opposite trend - gradual acquisitions and property connections, such as the Bohemia energy – Innogy etc. Some companies have financial losses due to overvalued purchases, incorrectly chosen rewards for “contracted volume from intermediaries”, neglected receivables, ignorance of cross-border energy transfers, for not paying the distribution costs on time (state company implies penalty of 1 % p.d.), last but not least losses with large fluctuations in expected consumption, extreme imbalances, price drops and currency exchange rates changes around Covid-19. Sold companies usually end up in the hands of foreign conglomerates. To freeze the current situation and prevent new entities from entering the market, biggest companies have introduced so-called “retention price lists”, which mean they are addressing all customers who want to go to another supplier with a price, that is significantly below the market value of the price. These losses are recovered by increasing prices of other customers in the portfolio.

The trend of merging entities is also evident in the area of commodity exchange energy markets, when the EEX exchange currently dominated the almost pan-European commodity exchange market. To sum up, unless there are innovative discoveries or appropriate state interventions, the future belongs to a few foreign multinational corporations and ČEZ in the area of electricity trading and few entities providing commodity exchange services, dictating their fees due to monopoly.

**REFERENCES**

WHO ARE THE DECISION-MAKERS IN NON-PROFIT SPORT CLUBS FROM TRANSITION COUNTRIES?
Igor Ivašković ¹

Abstract:
The article discusses the hierarchies of decision makers in non-profit sport clubs. On the basis of data, collected in 73 sport clubs from four South-East European countries, author identifies: a) who carries the largest part of responsibility for the organizational performance; b) who has the most important influence on HRM activities; and c) are those results in relation with the hierarchies of interest groups. The results indicate that private sponsors’ involvement significantly increases in top quality clubs, while the interferences of volunteers, local community, the state and municipal authorities are stronger in lower ranked clubs. The greatest responsibility for the clubs’ performance is on coaches, athletes, and clubs’ presidents. In the field of HRM the influences of the sports directors, sponsors' representatives and agents increase, while the influence of the clubs' presidents decreases with the level of quality. Volunteers’ interference in clubs’ activities stimulates presidents’ influence on HRM, decreases the degree of director’s performance responsibility, and decreases head coaches’ and sport directors’ influence on HRM. On the other hand, the interference of private sponsors puts more pressure on the functions of head coach and top management.

Keywords: non-profit clubs, organizational structure, HRM, responsibility.

INTRODUCTION
Sport clubs in South-Eastern Europe are raising the interest of scholars’ society in the last two decades. In those former centrally planned states even highly professional top sport clubs still operate as non-profit organizations (Ivašković, 2019). This fact often implies their vague ownership structure and unclear hierarchies of their beneficiaries. The root of those problems seems to be the lack of transparent identification of all interest groups and the amount of their financial participation in clubs’ budgets. Some studies showed how important are the sources of funds on sport clubs’ strategic decisions (Ivašković, Čater, & Čater, 2017). However, it is still unclear how the hierarchies of stakeholders reflect on the distribution of power within their organizational structures, especially on the field of human resources management (HRM), which has been found to be crucial for the success of sport clubs (Ivašković, 2015). At the same time it is also unclear who and to what amount bears the responsibility for the organizational performance in those organizations.
The aim of this study is therefore to shed new light on the process of decision-making in South-East sports clubs by analysing the hierarchy of interest groups and the identification of most powerful positions within clubs’ organizational structures. Moreover, this study intends to expose not only beneficiaries, but also the responsibility structure within non-profit sport clubs, and finally to compare the findings among those organizations on different quality levels. Theoretically, the study enables better understanding of the relationships between stakeholders and organizational structures of non-profit sport clubs. From the practical point of view, the results should be useful to managers in those sport organizations to anticipate the pressures from various interest groups, and to align their hierarchies with clubs’ missions and organizational objectives.

LITERATURE REVIEW AND HYPOTHESES
Sport clubs represent specific type of organizations which are tightly connected with their local environments. The dependence relationship seems to be even stronger in the case of non-profit sport clubs. Moreover, non-profitability frequently implies lack of transparency and many different interest groups might have important role in clubs’ activities although they are unnoticed for the external observers. Identification of hierarchy of stakeholders is thus fundamental thing in order to understand operations of non-profit sport clubs (Ivašković, 2019). Pfetfer and Salancik (1978) claimed that certain interest group may belong to inner or external organizational environment, while Freeman and Reed (1983) defined them as any group or individual who can affect or is affected by the organizational activities. More powerful interest groups have the ability to control the organization by withholding resources or/and support, limiting its access to new markets or boycotting its products (Seeger, 1997, p. 9). The literature provides plenty of evidences that stakeholders’ hierarchy affects the organizational plans and strategies (Ivašković, 2019; Barringer & Bluedorn, 1999; Berman, Wicks, Kotha, & Jones, 1999; Selvin & Covin, 1997). However, there are still some ambiguities among scholars regarding so called “key stakeholders”. Some authors argued that internal stakeholders are formally responsible for the strategy determination and are thus also “the key decision makers” (Mintzberg, 1983, p. 26–30; Pučko, 1999, p. 365), while others showed that in non-profit

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organizations external stakeholders might have powerful influence as well (e.g. Ivašković, 2019). The fact is, however, they usually do not affect organizational activities directly, but rather use various ways and means to influence certain positions in organizational structures and consequently shape organizational behaviour in line with their ambitions (Mintzberg, 1983). Therefore, certain positions within organizational structures might be in dependent relationship with external stakeholders, which causes obedience of inner groups to external interests (Frooman, 1999). Apparently, the organizations which formally do not pursue profit seem to have more interest groups engaged in their operations. The consequences are not only multiple relations between them (Drucker, 1992), but often also contradicting objectives which are pushed in front of organizational management by different interest groups and individuals.

Sport clubs from South East Europe more or less still operate as non-profit organizations, and at the same time their managements are reluctant to transform the organizations even though the legislation in some of those countries enables that (Ilešič, 2004; Ivašković & Ćater, 2018). In the post-communist era this caused the space for potential collision of public and private interests, and placed the clubs’ managers in the position to decide to which side a particular club will incline. Usually clubs with top sport ambitions have to seek funds mostly among profit-driven private enterprises (Ivašković et al., 2017), which causes strong criticism by those who advocate the idea of non-profit sport clubs transformation into private profit-oriented clubs with transparent ownership and interest group structure (Bergant-Rakočević, 2008). On the other side, other part of scholars (e.g. Ben-Ner & Van Hoomissen, 1991; LeRoux, 2009) defend the position that non-profit organizations, including sport clubs, are usually influenced by those interest groups who wish to provide benefit to vulnerable segments of society and without purely profit motives. According to that position, it would be unfair to cut those organizations from public funds, due to the fact they emphasize the engagement of youth and enable consequential sport values proliferation among the whole society. It seems that the arguments of each position are understandable, and are therefore the driving force for this research.

The interest groups interfere in clubs’ activities depending on their degree of interest and the power to impose their ambitions (Mendelow, 1991; Polonsky, 1995). Stakeholders with great power and simultaneously high level of interest have the highest potential to benefit or harm an organization and are thus usually denoted as key players (Mendelow, 1991). In the most cases those are individuals or groups, who provide significant percentage of annual funds for an organization (LeRoux, 2009), thus the process of dividing club’s budget funds usually discloses the most powerful stakeholders (Baroncelli & Lago, 2006; Kern, Schwarzmann, & Wiedenegger, 2012). If an organization is a subject of interfering by numerous interest groups with similar power and similar degree of interest, and of course with mutual conflicting objectives, the number of potential conflicts increases (Drucker, 1992). The consequences might be seen as unproductive processes and the loss of organizational focus, which is usually also the cause for poor organizational performance.

Unlike US sport competitions European sport clubs compete in leagues, which include professional and amateur organizations at the same time. In those leagues profit sport clubs often compete against non-profits. For the latter pursuing top sport results versus an aim of developing the local community is claimed to be the key strategic dilemma (Breitbarth & Harris, 2008; Ivašković, 2015; Kern et al. 2012.). This is actually a clash of two opposing concepts. According to the first one sport result is a value by itself (Ibsen, 1999), while the second sees an organization as a part of the local community with the main aim of providing benefits to that community. Although sometimes both aims are presented as complementary, sooner or later every manager has to decide whether the club is going to encourage the involvement of the local population in club’s activities or will it pursue obtaining the best skilled athletes from wider (international) markets (Taylor, Doherty, & McGraw, 2008, p. 28). The top sport results ambitions are usually the driving force for attracting better skilled athletes. Unavoidably this leads also to necessity of higher financial investments, which is an opportunity for profit-oriented private sponsors, which are generally willing to take greater risks than their public counterparts (Cuervo & Villalonga, 2000; Megginson, Nash, & Mathias, 1994; Zahra, Neubaum, & Huse, 2000). In line with that assumption some studies showed that public organizations interfere more in those organizations, which are attached to local community and are less profit-driven (Brouthers et al., 2007; Cuervo & Villalonga, 2000; De Castro et al. 1996; Lioukas, Bourantas, & Papadakis, 1993; Whitley & Czaban, 1998; Zahra et al., 2000). Therefore we suggest our first hypothesis.

**Hypothesis 1:** Private and profit-oriented sponsors interfere more in the operations of sport clubs from higher ranked divisions.

Results of previous studies show that sport organizations from the studied area of South-Eastern Europe are mostly financed by profit-oriented private enterprises, followed by the municipality and state, while the third sector’s organizations rarely participate in sport as sponsors or donors (Škorić et al., 2012). Other empirical studies show that higher ranked clubs are not getting only larger amounts of money, but they also engage significantly larger number of professionals (Ivašković, 2018). Due to larger annual budgets higher ranked clubs are more professionalized organizations with larger organizational structures, which should result with the process of decentralization. Thus, we propose the following two hypotheses.
Hypothesis 2: Decision making on the HRM field in lower ranked clubs is more centralized.

Hypothesis 3: Responsibility for the organizational performance is in higher ranked clubs dispersed among larger number of positions in the organizational structure.

In line with abovementioned argumentation and the derived hypotheses we can logically assume the correlation between private sponsors’ interference in clubs’ activities and the degree of responsibility and influence on HRM of certain positions within organizational structures of observed clubs.

Hypothesis 4: Interference of private sponsors in clubs’ activities is in positive correlation with the degree of head coaches’ responsibility for organizational performance.

Hypothesis 5: Interference of private sponsors in clubs’ activities is in positive correlation with the degree of head coaches’ involvement in the HRM.

Hypothesis 6: Interference of volunteers in clubs’ activities is in positive correlation with the degree of clubs’ presidents’ responsibility for organizational performance.

Hypothesis 7: Interference of volunteers in clubs’ activities is in positive correlation with the degree of clubs’ presidents’ involvement in the HRM.

METHODS

Sample and Data Collection

The study was performed among men’s basketball clubs in Bosnia and Herzegovina, Croatia, Serbia, and Slovenia. Although only one branch of the sport industry, basketball organizations might be, according to their size and financial budgets, considered as representative one for other South-East European sport branches with mostly non-profit sport clubs. Indeed, those basketball clubs are relatively small organizations, usually with fewer than 50 club members and an average budget of 0.4 million EUR. Despite the disintegration of Yugoslavia cooperation among observed basketball clubs remained strong as the clubs established the regional Adriatic Basketball League (ABL), which offers the opportunities for the best clubs from different national leagues to compete against each other. Due to similar legal heritage the vast majority of basketball clubs also retained their status of non-profit organizations.

Clubs’ presidents were used as the main source of information, because they usually have the best overview regarding the decision-making processes in their organizations. 249 of basketball clubs were invited to participate in this study during seasons 2013/2014 and 2014/2015. 73 clubs’ presidents agreed to participate, which represents the response rate of 29.3%. The sample consisted of 27 (out of 56; 48.2% response rate) first-division clubs, 31 (out of 73; 42.5% response rate) second-division clubs and 15 (out of 120; 12.5% response rate) clubs from the third divisions of national competitions in four selected countries. The participants had on average 4.87 (SD = 3.70) years of management experience in the current club and on average had held their presidential position for 2.53 (SD = 1.36) years. Of the 27 first-division clubs, 9 (out of 11; 81.8% response rate) also participated in the Adriatic Basketball League and other international competitions (EuroChallenge cup, Eurocup, or Euroleague). Apparently, only among the third division clubs the response rate was relatively low, which implies lower reliability of results for this particular segment.

Measures

Hierarchy of interest groups. For the purpose of this study we invited a group of 12 experts from the field of sport management, each with at least five years of work experience in non-profit basketball clubs. All experts were invited to form a list of most influential interest groups regarding their influence on non-profit sport clubs. After that we combined similar answers and made the following list of interest groups:

- Volunteers - include all club members who are not employed in the club and do not get paid for their work in particular club.
- Professional employees - include all organizational members who have an employment contract (full-time or part-time working relationship).
- Private sponsors – include all private organizations that provide funds to the club and are not predominantly state or municipally owned.
- The municipal and state organizations – include all state or municipal organizations including state- or municipally-owned enterprises.
- Local community – include local residents from the particular municipality, where the club is registered and/or plays home games, and are at the same time not members of the club.
• Media – include all media organizations.
• National sport associations - include organizations that provide a framework of the competitions in which a club participates.
• The general public.

Due to the fact that there are no clear borders between different interest groups, there is a possibility that an individual could be a potential member of two or more interest groups. This, however, is not unusual since an individual always engages in different social groups and plays various social roles in his/her life. In order to assess the influence of particular group on organizational activities, respondents in this study had to make an assessment on the actual interference of group on a 7-point Likert scale that was anchored at the extremes (1) “does not interfere in organizational activities at all” and (7) “interferes in organizational activities more than any other listed group.”

**Influence on HRM activities.** The same group of 12 experts from the field of sport management formed a list of the most influential individuals and groups regarding their influence on HRM policy and activities (e.g. signing athletes etc.). After combining similar answers we made the following list: club’s president (individual), top management (group), sponsors’ representatives, head coach, athletes’ agents, and sport director. The clubs’ presidents had to assess the influence of an individual or an interest group on the determination of the HRM processes on the 7-point Likert scale that was anchored at the extremes (1) “does not have impact on HRM activities at all” and (7) “influences HRM more than any other individual or group.”

**Responsibility.** The same respondents also defined to what extent the same individuals or groups within the clubs’ organizational structures are responsible for the overall performance of the club. They assessed the degree of responsibility on the 7-point Likert scale, which was anchored by extremes (1) “the individual or club’s body do not bear any responsibility at all”, and (7) “the highest degree of responsibility within the club”.

**Data analysis**

The data processing started with the classical statistical analysis and an analysis of the differences among groups of clubs from different quality levels. Then the measure of performance was obtained by employing explorative factor analysis (EFA). Finally, we assessed associations between variables with correlation analysis.

**RESULTS AND DISCUSSION**

The analysis started with the comparison of interest groups’ interference in clubs’ activities. Table 1 shows that volunteers were in average perceived as the most active group regarding interfering in the activities of observed non-profit sport clubs. Volunteers were followed by the state and municipal organizations, while the general public was perceived to be the least active group from this aspect.

More detailed analysis showed that private sponsors were among the first division clubs the group which was perceived to interfere most in clubs’ activities. They were followed by the professional employees on second position, while, once again the general public and media were perceived to interfere the least. In the segment of top quality clubs (international competitors), the interference of private sponsors was even larger, while the clubs from the second and third quality level experienced strongest interference by volunteers, followed by the state and municipal organizations on the second position. Analysis of variance (ANOVA) resulted with confirmation of statistical differences in cases of six stakeholders’ interference in clubs’ activities. The differences among clubs were also compared with post hoc tests (i.e. LSD and Tamhane), which resulted with findings listed in the last column of the Table 1.

In line with our expectations results showed that private sponsors interfere more in the sport clubs from first national divisions, while interest groups like volunteers, state and municipal authorities show relatively more interest in affecting second and third division clubs. Further analysis disclosed that the local communities interfere more in lower division clubs’ activities, while professionals affect relatively stronger the organizations from the first national divisions. Additional t-test also showed that private sponsors (MD = 2.13, t = 7.70, p = .000) interfere in the operations of higher ranked clubs, while the state and municipal authorities (MD = -2.14, t = -4.32, p = .000), volunteers (MD = -4.52, t = -8.60, p = .000), and local community (MD = -1.44, t = -3.63, p = .002) interfere significantly less in those clubs.
Table 1. Interest groups’ interference in club’s activities

<table>
<thead>
<tr>
<th>Interest group</th>
<th>M</th>
<th>Level of national competition</th>
<th>Statistically significant differences among groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. (ABL) 2. 3.</td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td>5.39</td>
<td>3.81 (1.44) 6.34 6.40</td>
<td>1. and 2.; 1. and 3.</td>
</tr>
<tr>
<td>Private sponsors</td>
<td>4.36</td>
<td>5.44 (6.22) 3.77 3.57</td>
<td>1. and 2.; 1. and 3.</td>
</tr>
<tr>
<td>The state and municipal authorities</td>
<td>4.54</td>
<td>3.74 (2.67) 4.94 5.21</td>
<td>1. and 2.; 1. and 3.</td>
</tr>
<tr>
<td>Local community</td>
<td>3.71</td>
<td>3.63 (2.44) 3.29 4.79</td>
<td>1. and 3.; 2. and 3.</td>
</tr>
<tr>
<td>Media</td>
<td>2.94</td>
<td>3.23 (2.33) 2.70 2.93</td>
<td>no significant differences</td>
</tr>
<tr>
<td>National federation and sport clubs</td>
<td></td>
<td>4.07 (2.33) 3.57 4.86</td>
<td>2. and 3.</td>
</tr>
<tr>
<td>The general public</td>
<td>2.65</td>
<td>2.96 (3.22) 2.63 2.07</td>
<td>no significant differences</td>
</tr>
</tbody>
</table>

Note. M – mean; ABL - Adriatic Basketball League.

Similar as in the case of interference in clubs' activities Table 2 indicates differences between groups of clubs regarding the influence on the HRM activities. Apparently, the top managements are the most active in the second divisions’ clubs, the head coaches in the first divisions’ clubs, and clubs’ presidents in the lower divisions’ clubs. Interestingly, in the sub-segment of the top quality clubs sports directors are showing the greatest interest in those activities. Moreover, the results indicate the influence of the clubs’ presidents decreases with the quality level of competition, while the influence of private sponsors increases. Among the first divisions’ clubs, head coaches have stronger influence on the HRM, as well as sports agents and sports directors, while there were no statistically significant differences found regarding their influence in the second and lower divisions’ clubs. Athletes are the most active from this aspect in the lower divisions’ clubs, which is not surprising, due to the fact that in those clubs the same person usually combines several positions within organizational structure. Organizational growth and process of professionalization shape the organizational structure such that middle and lower managerial levels emerge, which affects transferring HRM decisions and activities to the specialized bodies that do not exist in lower divisions’ clubs. T-test disclosed that in the top quality clubs the clubs’ presidents have weaker influence on HRM, while sponsors, athletes, and sports directors have more important role in those activities than in other clubs.

Table 2. Influence on HRM

<table>
<thead>
<tr>
<th>Subject</th>
<th>M</th>
<th>SD</th>
<th>First division clubs</th>
<th>National (ABL) Second national division</th>
<th>Lower national divisions</th>
<th>Differences between groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club’s president</td>
<td>5.05</td>
<td>1.91</td>
<td>4.00 (3.33)</td>
<td>5.19</td>
<td>6.67</td>
<td>Differences between all groups</td>
</tr>
<tr>
<td>Top management</td>
<td>5.38</td>
<td>1.43</td>
<td>5.19 (5.56)</td>
<td>5.26</td>
<td>6.00</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Sponsor’s representatives</td>
<td>3.22</td>
<td>1.71</td>
<td>4.22 (4.33)</td>
<td>3.13</td>
<td>1.60</td>
<td>Differences between all groups</td>
</tr>
<tr>
<td>Head coach</td>
<td>5.05</td>
<td>1.53</td>
<td>5.89 (5.22)</td>
<td>5.03</td>
<td>3.60</td>
<td>1st and 2nd; 1st and lower</td>
</tr>
<tr>
<td>Agents</td>
<td>2.00</td>
<td>1.24</td>
<td>2.96 (3.56)</td>
<td>1.55</td>
<td>1.20</td>
<td>1st and 2nd; 1st and lower</td>
</tr>
</tbody>
</table>
Table 3 on the other hand shows that the function of the head coach bears the greatest responsibility for the clubs’ success in all three quality segments. Head coaches indeed feel the strongest consequences of good or bad result at the end of the season. As for other functions, in the sub-segment of top quality clubs, the clubs’ presidents are slightly more exposed to the pressure of the result. Otherwise, athletes are on the second position (after the head coach) regarding the degree of responsibility for performance. However, this is more the case with the first division clubs, while in lower quality competitions they carry somewhat less responsibility. Apparently, higher degree of professionalization (and consequential higher financial investments in athletes) reflects through higher degree of responsibility for organizational performance. We can see that in the clubs’ responsibility hierarchy athletes are followed by the club’s president and the top management. We can also notice that sports directors’ responsibility for organizational performance increases with the quality of the competition in which clubs participate. Thus, in the segment of first divisions clubs’ sport directors bear more responsibility than the clubs’ presidents.

Table 3. The degree of responsibility

<table>
<thead>
<tr>
<th>Subject</th>
<th>M</th>
<th>First division (ABL)</th>
<th>Second national</th>
<th>Lower national divisions</th>
<th>Differences between groups*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club’s president</td>
<td>5.42</td>
<td>5.19 (7.00)</td>
<td>5.34</td>
<td>6.00</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Top management</td>
<td>5.31</td>
<td>5.22 (6.67)</td>
<td>5.34</td>
<td>5.40</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Sponsor’s representatives</td>
<td>2.82</td>
<td>3.26 (3.33)</td>
<td>2.10</td>
<td>3.40</td>
<td>Significantly lower responsibility in second division clubs</td>
</tr>
<tr>
<td>Head coach</td>
<td>6.39</td>
<td>6.44 (6.89)</td>
<td>6.34</td>
<td>6.40</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Agents</td>
<td>2.67</td>
<td>2.73 (2.78)</td>
<td>1.62</td>
<td>4.60</td>
<td>Differences between all groups</td>
</tr>
<tr>
<td>Athletes</td>
<td>5.61</td>
<td>6.19 (5.44)</td>
<td>5.59</td>
<td>4.60</td>
<td>Significantly lower responsibility in lower division clubs</td>
</tr>
<tr>
<td>Sports director</td>
<td>4.31</td>
<td>5.63 (6.00)</td>
<td>3.86</td>
<td>2.80</td>
<td>Significantly higher responsibility in first division clubs</td>
</tr>
<tr>
<td>Others</td>
<td>1.93</td>
<td>3.33 (4.00)</td>
<td>2.17</td>
<td>1.00</td>
<td>Significantly higher responsibility in first compared to lower division clubs</td>
</tr>
</tbody>
</table>

Note. * - statistically significant differences at p < 0.05.

In the next phase of the research we conducted a correlation analysis between the activity of interest groups within observed non-profit sport clubs and the degree of HRM influence of their members (Table 4). Although not many statistically significant correlations were found, some of them are surprising. However, the fact that volunteers’ interference in clubs’ activities stimulates presidents’ influence on HRM and decreases head coaches’ and sport directors’ influence is in line with our expectations. The organizations with stronger volunteers’ impact are usually less professionalized and thus have simpler organizational structures, which also causes concentration of decision-making power in presidential function. On the other hand, the interference of private sponsors implies more pressure on the functions of head coach and top management. Private sponsors, indeed, are usually more profit driven, and thus seek ways and means to improve sport results of particular club. In order to achieve that sponsors have to ensure that decision-making process regarding the key decisions on the field of HRM are under influence...
of people with more knowledge. This causes broadening of decision-making processes at the top of the organizational structure, and transfers power from clubs’ presidents to top management, and at the same time causes specialization. This especially the case of decision-making regarding HRM in sport team, which results with greater head coach’s influence. The surprising result, however, is the fact that athletes’ influence on HRM decreases with greater interference of professional employees, which is the interest group that also includes professional athletes. One of possible logical explanations for that could be the desire of professional athletes to specialize for solely sport activities and thus do not spend their time for other parts of organizational processes, including HRM. On the other hand greater interference of this group affects the top management’s influence in this segment of organizational activities in a similar way as private sponsors’ interference does. The surprising finding is also the result which shows that the degree of local community members’ interference in clubs’ activities positively correlates with the HRM influence of private sponsors and agents. This might be a result of local community members’ ambition to transfer the key decision-making to those club’s members who are more in contact with local environment, especially if sponsors representatives and agents are members of particular local community. From the aspect influencing crucial HRM decisions national federations’ interference in organizational activities has similar effect like local communities’ engagement does. This result seems logical, since national sport federations in observed countries are mostly financed from their member clubs, and are therefore interested in strengthening sponsors’ position in decision-making process. The engagement of the state and municipal authorities, media, and general public did not result with statistical significant correlations from this aspect.

Table 4. Correlations between interest groups’ interference in club’s activities and the degree of influence on HRM (N = 73)

<table>
<thead>
<tr>
<th>Interest group interference/Influence on HRM</th>
<th>President</th>
<th>Top management</th>
<th>Private sponsors</th>
<th>Head coach</th>
<th>Agents</th>
<th>Athletes</th>
<th>Sport director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
<td>.28*</td>
<td>.18</td>
<td>-.17</td>
<td>-.27*</td>
<td>-.02</td>
<td>-.05</td>
<td>-.25*</td>
</tr>
<tr>
<td>Private sponsors</td>
<td>-.02</td>
<td>.30*</td>
<td>.04</td>
<td>.31*</td>
<td>.10</td>
<td>-.10</td>
<td>-.12</td>
</tr>
<tr>
<td>The state and municipal authorities</td>
<td>.07</td>
<td>.14</td>
<td>-.14</td>
<td>-.23</td>
<td>-.13</td>
<td>-.10</td>
<td>-.20</td>
</tr>
<tr>
<td>Professionals</td>
<td>.15</td>
<td>.34**</td>
<td>-.05</td>
<td>.17</td>
<td>.11</td>
<td>-.34**</td>
<td>.18</td>
</tr>
<tr>
<td>Local community</td>
<td>.03</td>
<td>-.04</td>
<td>.24*</td>
<td>-.13</td>
<td>.33**</td>
<td>-.22</td>
<td>.22</td>
</tr>
<tr>
<td>Media</td>
<td>-.10</td>
<td>.06</td>
<td>.00</td>
<td>-.01</td>
<td>.15</td>
<td>-.21</td>
<td>.09</td>
</tr>
<tr>
<td>National sport federation and sport clubs</td>
<td>.17</td>
<td>.14</td>
<td>.26*</td>
<td>.04</td>
<td>.14</td>
<td>.05</td>
<td>.00</td>
</tr>
<tr>
<td>The general public</td>
<td>-.12</td>
<td>-.08</td>
<td>-.02</td>
<td>-.06</td>
<td>-.01</td>
<td>-.17</td>
<td>.17</td>
</tr>
</tbody>
</table>

Note. ** P < .01; * P < .05.

In the last stage of statistical analysis we used correlation analysis once again in order to disclose the connection between the activity of interest groups within observed non-profit sport clubs and the degree of responsibility for organizational performance within organizational structures (Table 5). Similar as in previous analysis volunteers’ interference in clubs’ activities affects sport director’s position; apparently it decreases the degree of director’s responsibility. However, it does not have impact on other positions within organizational structure. The state and municipal authorities’ engagement in clubs’ activities causes from this aspect the same effects like volunteers’ interference, while the general public engagement causes the opposite result; it increases sport director’s responsibility. On the other hand, the interference of private sponsors has almost precisely the same impact like in the case of HRM influence; it puts more pressure on the functions of head coach and top management, which is the consequence of already explained sponsors’ profit motives. Once again results showed that the degree of local community members’ interference in clubs’ activities affects athletes’ agents; it increases their degree of responsibility for organizational outcome. Other interest groups’ engagements did not result with significant correlations between them and the degree of responsibility within organizational structures.
Table 5. Correlations between interest groups’ interference in club’s activities and the degree of responsibility (N = 73)

<table>
<thead>
<tr>
<th>Interest group interference/ responsibility</th>
<th>President</th>
<th>Top management</th>
<th>Private sponsors</th>
<th>Head coach</th>
<th>Agents</th>
<th>Athletes</th>
<th>Sport director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
<td>-0.06</td>
<td>-0.13</td>
<td>-0.16</td>
<td>-0.18</td>
<td>-0.01</td>
<td>-0.08</td>
<td>-0.35**</td>
</tr>
<tr>
<td>Private sponsors</td>
<td>0.14</td>
<td>0.26*</td>
<td>-0.09</td>
<td>0.40**</td>
<td>-0.03</td>
<td>0.17</td>
<td>0.07</td>
</tr>
<tr>
<td>The state and municipal authorities</td>
<td>-0.14</td>
<td>-0.14</td>
<td>-0.14</td>
<td>-0.06</td>
<td>-0.11</td>
<td>-0.02</td>
<td>-0.27*</td>
</tr>
<tr>
<td>Professionals</td>
<td>-0.06</td>
<td>0.02</td>
<td>-0.17</td>
<td>0.21</td>
<td>0.04</td>
<td>-0.12</td>
<td>0.20</td>
</tr>
<tr>
<td>Local community</td>
<td>-0.11</td>
<td>-0.21</td>
<td>0.11</td>
<td>-0.10</td>
<td>0.31**</td>
<td>-0.08</td>
<td>0.19</td>
</tr>
<tr>
<td>Media</td>
<td>-0.27</td>
<td>-0.23</td>
<td>-0.07</td>
<td>0.10</td>
<td>0.11</td>
<td>0.07</td>
<td>0.14</td>
</tr>
<tr>
<td>National sport federation and sport clubs</td>
<td>-0.14</td>
<td>-0.18</td>
<td>0.19</td>
<td>0.01</td>
<td>0.12</td>
<td>0.23</td>
<td>-0.12</td>
</tr>
<tr>
<td>The general public</td>
<td>-0.08</td>
<td>-0.10</td>
<td>-0.00</td>
<td>0.01</td>
<td>-0.06</td>
<td>0.02</td>
<td>0.30*</td>
</tr>
</tbody>
</table>

Note. ** P < .01; * P < .05.

CONCLUSIONS

The purpose of this study was to provide the following answers: 1) who carries the largest part of responsibility for the performance in non-profit sport clubs; 2) who has the most important influence on HRM activities in those organizations; and 3) are those results in relation with clubs’ hierarchies of interest groups (stakeholders).

In line with the first hypothesis, private sponsors represent by far the most influential interest group among the organizations from the first national divisions, and even more in the sub segment of top clubs which compete in international competition, and thus interfere in clubs’ activities the most. They are followed by the professional employees (the group which include professional athletes) in the second place. The least influential stakeholders in this segment of sport clubs are local community, media and the general public. On the other hand, differences between second and third division clubs are not so significant. Volunteers interfere in activities of those clubs more than any other interest group.

Regarding the ability to enforce the decisions on the field of HRM the top managements have the most power in the second division clubs, the head coaches in the first division clubs, and clubs’ presidents in the lower divisions’ clubs. The influence of the clubs’ presidents decreases with the quality level of competition, while the influence of private sponsors increases. Among the first division clubs, the head coaches have stronger influence on the HRM, as well as sports agents and sports directors, while athletes are the most active from this aspect in the lower division clubs, which is not surprising, due to the fact that in those clubs the same person usually combines several positions in organizational structure. On the other hand the paper shows that the function of the head coach bears the greatest responsibility for the clubs’ success in all three quality levels. Athletes are in the second position regarding the degree of responsibility in the first division clubs (in lower quality competitions they bear somewhat lower responsibility) and are followed by the club’s president and the top management. We can also notice that sports directors’ responsibility for organizational performance increases with the quality of the competition in which clubs participate. Therefore, we can also confirm the second and the third hypothesis.

Volunteers’ interference in clubs’ activities stimulates presidents’ influence on HRM and decreases head coaches’ and sport directors’ influence, which is in line with our seventh hypothesis. On the other hand, the interference of private sponsors puts more pressure on the functions of head coach and top management, which confirms the fifth hypothesis. Interestingly, athletes’ influence on HRM reduces with greater interference of professional employees, which is the interest group that also includes professional athletes. On the other hand greater interference of this group affects top management’s influence in this segment of organizational activities in a similar way as private sponsors’ interference does. The degree of local community members’ interference in clubs’ activities positively correlates with the HRM influence of private sponsors and agents.

Volunteers’ and the state and municipal authorities’ engagement in clubs’ activities decreases the degree of director’s responsibility, while the general public engagement causes opposite effect. However, we are unable to
confirm our sixth hypothesis that interference of volunteers in clubs’ activities is in positive correlation with the degree of clubs’ presidents’ responsibility for organizational performance. On the other hand, the interference of private sponsors puts more pressure on the functions of head coach and top management, which is in line with the fourth hypothesis, while local community’s engagement increases athletes’ agents’ responsibility.

This research contributes to a better understanding of the stakeholders’ influence in non-profit organizations, especially in the South-eastern European context. It represents one of the first attempts to investigate how stakeholder structure affects non-profit club’s organizational structure from the aspect of HRM and responsibility for performance. The findings from this study have several practical implications. They might offer the empirical support for the change of policy in those countries, where sport clubs still operate as non-profits, foremost to reconsider the transformation of top sport clubs in profit-oriented organizations. The identification of the most important interest groups and their impact on organizational structures might help the managements of non-profit sport clubs to anticipate the potential conflicting processes.

From the aspect of limitations, this study used only subjective survey-based data, which were collected only from non-profit sport clubs in four countries with similar historical background. This might influence the ambition to generalize the results. Also the response rate among the clubs from lowest quality levels was relatively low, which implicates lower reliability of the results for this segment. Therefore, we suggest additional empirical research on sport clubs from different environments.

REFERENCES


Abstract:
The paper presents the results of the research in the area of agriculture with a specific focus on secondary production valuation within the husbandry production in the environment of a small and medium-sized business enterprise. The topicality of this issue arises from the practice needs and from the specific character and structure of the agriculture production formed by its own activity in the agriculture sector in small and medium-sized enterprises which do not use the International Financial Reporting Standards for the valuation, accounting and reporting of the agricultural production. The chosen method and the accuracy of the in-house price calculation of the secondary production in agriculture influences the determined in-house prices and the selling prices of secondary production and consequently the business enterprise economic result. The research results lead to a proposal of calculation for the in-house price of secondary husbandry production based on the content of active substances in secondary agriculture production. The proposed procedure to determine the in-house price was verified on the basis of the case study. The case study results document the refinement of the determined in-house price and the usability of the proposed method of calculation and pricing of the secondary production in the business practice of small and medium-sized enterprises in the agriculture area.

Keywords: agriculture, valuation, secondary husbandry production, farm fertilizers

JEL: Q14 – Agricultural Finance

INTRODUCTION

Agriculture has always been a significant part of state economies all around the world because it ensures one of the basic needs of the mankind – food. Agriculture in the current modern world does not make such a share in Gross Domestic Product (GDP) as other fields but its significance has not decreased. Since 1989 the GDP share of agriculture has annually decreased in the total GDP in the Czech Republic. Specifically there was the decrease from original 4% in 1989 to less than 2% in 2017 (Dvořáková 2017).

Business people in agriculture as well as other business people in the Czech Republic have to obey the Act No. 563/1991 Coll., about accounting, Decree No. 500/2002 Coll., which are implemented by certain provisions of the Act 563/1991 Coll., about accounting, as amended later, for accounting units which are entrepreneurs using the double-entry bookkeeping and other legal amendements. Within the Czech legislation there is no legal regulation dealing with the specifics of agriculture production in the perspective of valuation of production created by business’s own activity. There is a different approach to this area from International accounting standards (International Accountig Standards/International Financial Reporting Standards - IAS/IFRS), which include the standard „IAS 41 – Agriculture“, that thoroughly deals with this area (Dvořáková 2014).

The agriculture production is in most cases a kind of joint production, i.e. except the main product there is also an inseparable secondary product. This fact brings certain problems mainly into the process of main and secondary production valuation when it is complicated to determine precisely and correctly which costs should cover which product (Novák 1996).

The issue of secondary production valuation in agriculture is researched mainly by the author Poláčková (2010), further on the specifics of valuation in agriculture are researched by Dvořáková (2017). Among other authors dealing with the topic of valuation in agriculture we can name Brčák (1991), Valder (2008), Neplechová (2007), Lőrinczová (2014), Sedláček (2010) and others. In a wider international span the issue of valuation and accounting in agriculture is researched by e.g. Aryanto (2011), Barlev and Haddad (2003), Rozentale and Ore (2013) and others.

OBJECTIVES, METHODOLOGY AND DATA

The methods of qualitative research and explanatory and interpretation methods were used for the research of the stated issue. In the first stage of the research analysis and evaluation of secondary sources was performed by the desk research method. Further on the case study method was used documented by internal data and information which was obtained from a selected medium-sized agricultural enterprise. The enterprise data collection and

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2 University of West Bohemia, Plzeň, Czech Republic
evaluation was performed in the period between January and June 2019. The selected agricultural enterprise (a joint-stock company) has been operating on Czech market for more than 20 years and the subject of its business is crop and livestock production. Through the general scientific methods (analysis, synthesis, induction, deduction and specification) the results of the performed research resulted in the proposal of the in-house price calculation process for the secondary production (farm fertilizers) in livestock production based on the determination of active substance content (nitrogen, phosphorus pentoxide, potassium oxide).

The main target of the research is to identify, analyze and evaluate the specifics of the secondary production valuation created by own activities within the animal husbandry. Another target is to document and discuss the specifics within the valuation of secondary husbandry production. The third target is to make a proposal for valuation process for the own secondary production in husbandry production with the objective to refine the calculation of the in-house price based on determination of active substance content. The proposed calculation better reflects the economic practice reality, it contributes to improvement of calculation technique for the secondary production in-house price in animal husbandry and it has positive impacts on correct economic result reporting and it creates the basis for determining the market price of secondary production in husbandry production for the eventual sale.

The Accounting Act in the Czech Republic defines the valuation bases for assets obtained in various ways, from assets purchase to acquisition by own activity. These valuation assets bases are the same for all sectors of economy. For valuation of inventory created by own activity it is determined to valuate by own costs (it means direct costs spent on production or another activity, or also assignable indirect costs which are associated to production or another activity). The content, range and structure of calculation items of own costs is not legislated in the Czech system and the professional sources demonstrate the recommended ways for own costs calculation, i.e. in-house price calculation. However, their application depends entirely on the individual decision of each business entity (Novák 1996).

The methods for calculation compiling for associated and non-associated production in agriculture are identical with other production and non-production sectors of economy according to professional sources. For joint production in agriculture are recommended specific calculation methods: subtraction, division with relative numbers and combination of methods. In various sectors the determined costing units can be different (performance which is related to the costs), within the agriculture activity the costing unit can be for example a live animal or a feeding day (Dvořáková 2018, Poláčková 2010).

**RESEARCH RESULTS**

**Valuation of Secondary Products in Husbandry Production in a Selected Business Entity**

An agriculture company (legal form of a joint-stock company) which has been operating in the Czech Republic for more than 20 years was selected for performing the case study. The EU Commission recommendation from 6th May 2003 about the definition of micro enterprise, small and medium-sized enterprises determines three key indicators for defining the enterprise size (number of employees, quantity of assets and an annual turnover). In 2018 the researched enterprise had 110 employees, the assets value was 830,000 CZK and the annual turnover 150 mil. CZK. Based on this data the enterprise is classified as a medium-sized enterprise and according to Czech criteria of legal accounting directives it belongs to medium accounting units.

The researched enterprise is engaged in breeding dairy cattle and associated milk production (it is a joint production). The main product is milk, secondary products are meat (sale of bulls and older dairy cows), newborn calves, and also manure, slurry and liquid manure. The part of secondary products (manure, slurry and liquid manure) is not sold to a third person in most of the cases. In the case when the enterprise operates not only in cattle breeding but also in plant production these secondary products (i.e. manure, slurry and liquid manure) are mostly used as fertilizers in the plant production. A summary professional term farm fertilizers is used for such secondary husbandry production.

An agricultural enterprise uses the in-house price on the level of valuation in own costs for valuation of the farm fertilizers. In economic practice it is very difficult to allocate the costs which relate to farm fertilizers but not to milk production as precisely as possible in terms of choosing the appropriate calculation method and the technique for in-house farm fertilizers price determination. So far the in-house price has been determined by the researched enterprise based on its consideration, experience or historical habits. Another possible method of secondary production (farm fertilizers) calculation is the possibility to use the calculation method based on active substances content for determining the in-house price (see Poláčková 2010 for more details).

This calculation method is based on the basic premise that when the enterprise uses its own farm fertilizers it does not have to buy industrial fertilizers. It means that one measure unit (1 kg) of active substance (nitrogen, phosphorus pentoxide, potassium oxide) contained in farm and also industrial fertilizers has the same value expressed in monetary units.
Farm fertilizers produced by own activity contain three basic active substances (mineral nutrients): nitrogen (N), phosphorus pentoxide (P$_2$O$_5$) and potassium oxide (K$_2$O) and the same active substances are also in industrial fertilizers. For the use of the calculation method based on the active substances content it is needed to determine the amount of mineral nutrients contained in the farm fertilizer first (Mz). It can be done by professional measurement (which is financial and time demanding for the enterprise) or for example by using the values stated in Decree no. 377/2013 Coll., about storage and use of fertilizers. The content of active substances stated in this decree differs according to the kind of animals, kind of bedding and the type of farm fertilizer – manure, slurry, liquid manure). The formula (1) demonstrates the proposed method for nutrients valuation calculation (Oz) in own farm fertilizers.

$$O_z = M_z \times C_z \times K_u \times K_m$$  \hspace{1cm} (1)

where:

- $O_z$ – mineral nutrients valuation in monetary units/1 t farm fertilizer,
- $M_z$ – amount of mineral nutrients in kg/1 t farm fertilizer,
- $C_z$ – price of clean nutrients/1 kg,
- $K_u$ – effectiveness coefficient,
- $K_m$ – manipulation coefficient.

The price of pure nutrients ($C_z$) in farm fertilizers can be calculated from the price of industrial fertilizers which contain the same active substances. This value can be found in the data published by the Czech statistical office or the enterprise can calculate the value itself based on the price of industrial fertilizers which it buys. Table 1. presents the determined valuation ($C_z$) of 1 kg nutrients for each of the three basic active substances (nutrients), which the farm fertilizers contain. These values were calculated from average prices of purchased industrial fertilizers which value was recalculated on the basis of the active substance content (Mz).

Table 1. Valuation calculation of mineral nutrients ($C_z$) in farm fertilizers (CZK/1 kg)

<table>
<thead>
<tr>
<th>Mineral Nutrient</th>
<th>$C_z$ - Valuation (CZK/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>19.42</td>
</tr>
<tr>
<td>P$_2$O$_5$</td>
<td>27.76</td>
</tr>
<tr>
<td>K$_2$O</td>
<td>25.62</td>
</tr>
</tbody>
</table>

Source: Own processing, 2019

Other variables in the formula (1) are the effectiveness coefficient ($K_u$) and the manipulation coefficient ($K_m$). Determining their size is in the agricultural enterprise’s competence. For example Poláčková (2010) in her publication recommends to determine the effectiveness coefficient as follows: for nitrogen (N) value 0.7; for phosphorus pentoxide (P$_2$O$_5$) - value 1.0; for potassium oxide (K$_2$O) - value 0.7. These recommended values are used in the following calculation for valuation of mineral nutrients in selected farm fertilizer – see Tab. 2). Manipulation coefficient expresses the necessity to spend higher costs on implementation and manipulation with farm fertilizers. In the researched enterprise the manipulation coefficient was determined to 0.8 on the basis of controlled interviews with the management of the examined company.

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Table 2. Valuation calculation of mineral nutrients in a selected farm fertilizer – manure (CZK/1 t)

<table>
<thead>
<tr>
<th>Mineral Nutrient</th>
<th>Manure (CZK/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>72.86</td>
</tr>
<tr>
<td>P₂O₅</td>
<td>88.83</td>
</tr>
<tr>
<td>K₂O</td>
<td>124.62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>286.31</strong></td>
</tr>
</tbody>
</table>

Source: Own processing, 2019

Further on it is necessary to include the organic substances (mineral nutrient) contained in straw, which is a part of farm fertilizers, in the in-house price of farm fertilizers calculation. The valuation of organic substances in 1 tonne of straw is calculated according to the same formula (see formula 1) as in the farm fertilizers. The value of all three active substances is added and then it is expressed as the aggregate value for 1 kg of organic substances. This sum is consequently multiplied by the amount of organic substances in the given farm fertilizer.

For the selected farm fertilizer (manure) it is the following calculation for the needs of the in-house price calculation:

Nitrogen (N) = 5 kg * 19.42 CZK * 0.7 * 0.8 = 54.38 CZK/1 t of straw,

Phosphorus pentoxide (P₂O₅) = 2.1 kg * 27.76 CZK * 1 * 0.8 = 46.64 CZK/1 t of straw,

Potassium oxide (K₂O) = 13.2 kg * 25.62 CZK * 0.8 * 0.8 = 216.44 CZK/1 t of straw.

According to the performed calculation the total value of nutrients in 1 tonne of straw is 317.46 CZK, which means that for 1 kg of organic substances (minerals nutrients) in straw the financial value is 0.32 CZK.

There is 17 % of organic substances from straw in 1 tonne of manure and for quantifying their monetary value we use the following calculation:

170 kg x 0.32 CZK = 54.4 CZK/1 t of manure

By addition of these two of the above calculated values in monetary expression, i.e. monetary values of mineral substances in straw (54.4 CZK) and monetary values of active mineral substances in manure (286.31 CZK), we get the total in-house price for selected farm fertilizer (manure) which was determined on the basis of the proposed calculation method based on valuation according to the active substances content.

In-house price = 286.31 CZK + 54.4 CZK = 340.71 CZK/1 t

In the researched enterprise the original in-house price of the selected farm fertilizer (manure) was determined to 300 CZK/t. According to the proposed calculation method for in-house price calculation the costs allocation was refined for 1 tonne of the selected farm fertilizer. Specifically it means that the calculated in-house price was increased by 13.7 % which influences the determination of the in-house and the real market price of the production in plant and animal production and it also influences the reporting of economic result in the agricultural enterprise.

CASE STUDY RESULTS GENERALIZATION

Based on the results evaluation of the performed case study we can propose and recommend a model calculation method for valuation of farm fertilizers created by own activity in agricultural enterprises. The basic assumption for the proposed method use is that the agricultural enterprise runs animal and also plant production. The proposed method is suitable for small and medium-sized enterprises in agricultural area which do not use International Accounting Standards (IAS/IFRS), whose part is standard IAS 41 – Agriculture, for valuation and reporting.

1. The first step is determination of the active substances content in the selected farm fertilizer. We can either use the data from the enterprise’s own measurement or we can proceed according to the standards which determine the content of the active substances in farm fertilizers.
2. The second step is valuation of the basic active substances contained in the farm fertilizer in monetary units. The average sale price published by the Czech statistical Office or the prices which the enterprise uses to buy industrial fertilizers can be used for their valuation. These values are recalculated on the basis of the active substance content in a given product so as it expresses the price for a measured unit of the given active substance.

3. The third step of the proposed calculation method is expressing the monetary value of farm fertilizers for which the active substances’ average price and their content in the farm fertilizer is used. This value can be further on increased by e.g. costs connected to manipulation or storage of the fertilizers. Each agricultural enterprise can adjust the calculation to its own situation to show the reality of costs in the in-house price of farm fertilizers as accurately as possible.

The proposed calculation method for determination of farm fertilizers valuation in the amount of own costs was verified in husbandry production of the researched enterprise with the main focus on cattle breeding. The proposed calculation method can be used in a similar way for farm fertilizers obtained by breeding other farm animals. This calculation method can be also applied for other kinds of farm fertilizers. In the case study the proposed calculation method is verified and interpreted for a selected farm fertilizer.

DISCUSSION AND CONCLUSION

Valuation of secondary production created by own activity in the agricultural area is a significant part of financial management of an enterprise. Agricultural activities usually consist of plant and animal production. These productions are inseparably connected in one functional agriculture cycle. This interconnection is reflected in the choice of calculation method for valuation of secondary products created by own activity in the husbandry production in the economic, financial and accounting aspect. The legislation standards in the Czech Republic leave this specific issue of valuation aside because there is no special legal regulation as for example in the International Accounting Standards (IAS/IFRS) where this issue is covered in one independent standard (IAS 41 – Agriculture). Small and medium-sized agricultural enterprises which do not have to valuate and report in accounting according to the International Accounting Standards have considerable freedom in this area. The valuation way of secondary agriculture production created by own activity is not regulated by legislation although the specific, mainly biological aspects of agriculture production demand a different approach to the valuation issue than other production and non-production sectors. The question is whether the freedom is for the benefit of the whole matter.

This paper presents the results of secondary products valuation within the husbandry production, specifically it deals with farm fertilizers. In most cases these fertilizers are further consumed in plant production of the agricultural enterprise and therefore it might seem that the in-house valuation does not represent an important part in the in-house value information management. However, exactly for the reason that the secondary products of the husbandry production enter the calculation of the agriculture enterprise twice, the significance of a correct and accurate allocation of secondary production costs and the choice of an adequate calculation method considering the agriculture secondary production specifics increases. Primarily farm fertilizers themselves decrease the main production costs within cattle breeding (dairy as well as meat). Secondarily they enter the plant production costs.

Farm fertilizers are produced naturally during animal breeding and actually they are biological waste which is secreted by animals. From the economic point of view it is a joint production in agriculture and in practice it is hard to determine the amount of costs connected to the secondary production in husbandry production. Furthermore there is no active market which would determine the market price. Therefore small and medium-sized enterprises determine the in-house price based on their judgement, experience and past period data. Farm fertilizers are often considered to be rather a waste than a full product. Their valuation is very often underestimated by the agricultural enterprises and their in-house price is very seldom updated although there objectively is increase in costs like water, energy, wages and others. This situation leads to incorrect and inaccurate reporting of total own costs of secondary production and therefore the economic result too. The freedom in secondary production valuation in husbandry production which small and medium-sized enterprises in the Czech Republic have also makes it impossible to objectively compare the costs of a production unit in any way.

The presented case study documents and interprets the procedure of a more objective way to valuate own farm fertilizers. It represents a specific method of secondary production in-house price calculation and brings stimulus for professional discussion or possible legislative adjustment. It is worth considering if the farm fertilizers and all agriculture production (or generelly the joint production in agriculture) deserve a standard which would determine the rules and approach for valuation in this area and also the boundaries for the creativity of business people in agriculture. The limitation of the documented calculation method based on the active substance content in secondary animal production is the necessity to follow the correct technological procedures in agricultural enterprises which means that the individual kinds of farm fertilizers should keep the content composition. To keep
the right technology in practice can be difficult in some cases and therefore business people in agriculture can ask questions what are the benefits and added value in the area of value management of agriculture enterprises which are brought by the proposed calculation method for in-house price of secondary production in husbandry production. The proposed secondary production calculation method reflects the reality of economic practice and it is beneficial for specification of costs allocation in secondary husbandry production created by own activity and it is beneficial for objective determination of the in-house price. In a wider economic context it is beneficial for improving of the in-house management in agriculture enterprises in the area of the in-house value information processing.

ACKNOWLEDGEMENT

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REFERENCES

6. Decree No. 500/2002 Coll., which is used to perform some provisions of the Act 563/1991 Coll., about accounting, as amended, for accounting units which are entrepreneurs using the double-entry bookkeeping accounting system. Legislation of the Czech Republic.
FEMALE ENTREPRENEURSHIP: A CALL FOR POST-STRUCTURALIST AND GENDER INTEGRATIVE RESEARCH
Lucia Lučka Klanšek

Abstract:
In this paper, I offer a critical summary of the terms and literature important for understanding the phenomenon of female entrepreneurship in the light of entrepreneurship theory and research. The motivation for this paper comes from the awareness that, in the last decades, the practice of female entrepreneurship has grown exponentially followed by a notable growth in research on the subject. This notion calls for an assessment of research contributions as well as for an identification of future research paths. Concerning this awareness, it is important to recognize that researchers are increasingly moving away from positivist and gender biased research towards feminist and gender integrative approaches to entrepreneurship. It is important to note that many reviews on the subject have been made, so the purpose of this paper is to present an overview of the existing knowledge and reasoning which may serve as an outline of key problems as well as a “pool of ideas” for further research. Moreover, I argue that integrative approaches are especially important for understanding the contextual embeddedness of female entrepreneurship and I outline the potential for studying female entrepreneurship in post-socialist countries.

Keywords: female entrepreneurship, post-structuralist, gender-integrative, post-socialist countries

CONCEPTUALIZING FEMALE ENTREPRENEURSHIP: DEFINITIONS AND CHALLENGES
Women-owned businesses and female (woman) entrepreneurs are one of the fastest-growing entrepreneurial populations across the world. This implies the importance of female entrepreneurship regarding employment, wealth creation and innovation. Although women entrepreneurs are becoming key drivers of the global economy, they still represent an understudied population (Brush & Cooper, 2012). The lack of research and the weaknesses of the current body of knowledge are well-documented (Henry et al., 2016); various literature reviews show that studies about female entrepreneurs make up less than 10% of all research in the field of entrepreneurship (Brush & Cooper, 2002).

An illustration on the evolution of female entrepreneurship as a discipline in relation to the wider field of entrepreneurship is given in Figure 1.

Figure 1: The Evolution of Women’s Entrepreneurship in Relation to the Broader Field of Entrepreneurship


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To this day, researchers and practitioners face challenges in defining the term “entrepreneurship”; much depends upon the perspective and academic background of the researcher (Bennet & Dann, 2000). One of the pioneers of entrepreneurship, Schumpeter (1934 as cited in De Bruin et al., 2006), saw entrepreneurs as “those who create new combinations, new markets, product, or distribution systems” (De Bruin et al., 2006, p. 586). Contemporary definitions, driven by the work of Shane and Venkatamaran (2000), see entrepreneurship as “the process through which new economic activities and organizations come into existence” (Davidsson, 2001, p. 675). These definitions also emphasize the individual–opportunity nexus. The nexus builds from “the presence of lucrative opportunities and the presence of enterprising individuals” (Shane & Venkatamaran, 2000, p. 217). The idea central to the nexus is that micro-level explanations and results of entrepreneurial action should not just center on the individual entrepreneurs, but should also look at the types and specifics of the pursued opportunities. In other words, modern approaches emphasize the fit between the individual and opportunity (Davidsson, 2015).

Meyer (2018) notes that the contemporary conceptualizations include vocabulary such as: innovation; risk-taking; opportunism; (starting) new organizations; new process combinations, etc. In addition, studies on entrepreneurship have an interdisciplinary lens and combine insights from psychology, sociology, economics, and other disciplines. However, while researchers in the field recognize the importance of psychological, cultural, and sociological factors, more economic models still dominate the entrepreneurial definitions.

As shown above, entrepreneurship is a long-present phenomenon and has been thoroughly investigated across fields. However, the first official study on female entrepreneurship happened in the 1970s, more specifically in 1976 when Eleanor Schwartz published a paper entitled “Entrepreneurship: A New Female Frontier” (Mayer, 2018).

When it comes to defining female (women) entrepreneurship, the situation is similar to conceptualizations of entrepreneurship as a whole. There is no single, unambiguous and generally accepted definition. Avolio (2011) proposes addressing the challenge of defining female entrepreneurship by focusing on the following criteria: (1) percentage of ownership; (2) mode of obtaining ownership; (3) relationship between management and ownership; (4) status of formal companies; (5) modes of employment; and (6) company goals.

In that regard, some studies (e.g., Rashmi, 2016) note that women should own 50% plus of the company for it to be treated as a women-owned enterprise, while other research does not follow the ownership criteria. With that in mind, researchers and practitioners should address the differentiation between companies founded by women and those acquired by women (e.g., inheritance, purchasing). Similarly, the differentiation between women-owners and women in management has to be considered. Another dimension is the comparison of self-employed women and women who generate employment for other people. The differentiation between profit-making and personal goals and between working in the formal sector vs working in the informal / non-profit sector should also be considered.

From a methodological perspective, the main challenge regarding female entrepreneurship is summed up in the following questions: (1) is female entrepreneurship an individual or collective concept; (2) is female entrepreneurship a social or natural variable? To answer these questions, Paoloni and Serafini (2018, p. 67) offer a classification presented in Table 1.

Table 1: Classification of female entrepreneurship (FE)

<table>
<thead>
<tr>
<th></th>
<th>Individual</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Social FE is the same concept as entrepreneurship.</td>
<td>FE substitutes the individual concept and its characteristics can be had by male entrepreneurs.</td>
</tr>
<tr>
<td>Natural</td>
<td>FE is an omonothic [sic] concept with respect to entrepreneurship.</td>
<td>FE substitutes the individual concept and its characteristics cannot be had by male entrepreneurs.</td>
</tr>
</tbody>
</table>


Based on the classification presented in Table 1, female entrepreneurship can be seen as a part of the overall entrepreneurship experience as well as a unique phenomenon that cannot be experienced by male entrepreneurs. Moreover, if female entrepreneurship is conceptualized as a natural variable, it is unchangeable over time and in different historical period as opposed to a social phenomena (variable) that is evolving over time and in different context.

It is important to note that since the 1980s, researchers are examining differences between female and male entrepreneurs. These studies highlight the variations in motives for entrepreneurship, business characteristics, barriers to entrepreneurship, personality traits, leadership and management, and business sector (Rey-Martí et al., 2015). Specifically, prior research was strongly focused on identifying the main features of women-owned firms and women entrepreneurs by comparing female and male entrepreneurs. Jennings and Brush (2013) provided an overview of fundamental questions, overarching answers and specific findings within women’s entrepreneurship research presented in Table 2.
<table>
<thead>
<tr>
<th>Fundamental Questions</th>
<th>Answer</th>
<th>Illustrative findings</th>
</tr>
</thead>
</table>
| Are women and men equally likely to become entrepreneurs? | No. Globally, men are more likely than women to engage in different forms of entrepreneurship. | • As compared to men, women are less likely to start a business.  
• As compared to men, women are less likely to run a new business (less than 3.5 years old).  
• As compared to men, women are less likely to be owners & managers.  
• As compared to men, women are less likely to be self-employed.  
• As compared to men, women are less likely to take part in academic entrepreneurship (commercializing scientific research). |
| Do female and male entrepreneurs differ regarding acquisition of financial resources? | Mostly yes. In general, companies owned and managed by women tend to be financed at a lower level and from different resources as compared to the male counterparts. | • As compared to men, women oftentimes start firms with lower levels of initial financing and they tend to have lower levels of debt and equity after the start-up phase.  
• As compared to men, women are less likely to utilize formal, external sources of financing during start-up phases and less likely to rely on debt financing.  
• As compared to male firms, female-entrepreneurs are less likely to be funded by angel and venture capital, as well as to issue an IPO. |
| Do female and male entrepreneurs foster diverse strategic, organizational and managerial practices within their firms? | Yes and no. Although studies show significant gender differences concerning strategies, there are not many findings on organizational and managerial differences. | • Female-led firms tend to be over-represented in retail and personal services and underrepresented in manufacturing, extraction and business services.  
• Female-led firms are more likely to be home-based and less likely to internationalize.  
• Female-led firms are more likely to pursue social goals. |
| Do female-led and male-led companies have equal performance? | Primarily no. A majority of economic indicators show that female-led businesses do not perform as well as those of male counterparts. However, this is not the case on other indicators. | • Female-led firms tend be smaller than those of men, whether size is measured by employment, revenues, or assets.  
• Female-led firms tend to generate lower profit levels as compared to male-led firms.  
• Self-employed women tend to generate less income as compared to men.  
• Evidence shows that female-led businesses have lower growth rates as compared to male-led firms.  
• Findings on firm survival are inconsistent.  
• Some evidence suggests that female-led firms perform similarly (or even better than male) on specific financial ratios and risk adjusted measures. |

CRITIQUE OF FEMALE ENTREPRENEURSHIP THEORY

In order to show support for post-structuralist theories and new directions in female entrepreneurship research, criticism regarding the current body of literature has to be considered. First, scholars on female entrepreneurship favored topics related to documenting and examining financial performance as compared to other more informative questions. The second line of criticism reflects the dominantly individualistic orientation (theoretical and methodological) and the lack of attention for contextual and historical variables and feminist perspectives. Ahl (2006) noted such a discourse practice could be simply called “individualism” (p. 9). Additionally, the third comprehensive criticism reflects the dominant objectivist ontological and epistemological position of most papers on female entrepreneurship. This objectivist stance presumes not only the existence of inherently “male” or “female” characteristics / dimensions, but supports measurability of such characteristics. This may lead to potentially false implications that significant differences exist between male and female entrepreneurs. Further, such a stance may lead to the development of gender-biased metrics (Hughes et al., 2012). Ahl (2006) noted such a discursive practice could be called “Men and Women as Essentially Different” (p. 7). An overview of studies on female entrepreneurship in the light of expanding questions and changing approaches is given in Table 3.

Table 3: Traditional vs Nontraditional Questions in Research on Female Entrepreneurship

<table>
<thead>
<tr>
<th>Explanations/Approaches</th>
<th>Traditional questions</th>
<th>Nontraditional questions</th>
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<tbody>
<tr>
<td>Individualistic explanation &amp; objectivist approach</td>
<td>Comparing the financial performance of female and male entrepreneurs.</td>
<td>Comparative research (men vs women) on strategies such as effectuation.</td>
</tr>
<tr>
<td></td>
<td>(See e.g., Wu &amp; Chua, 2012 as cited in Hughes et. al., 2012)</td>
<td>(See e.g., Hechavarria, Ingram, Justo, &amp; Terjesen, 2012 as cited in Hughes et. al., 2012)</td>
</tr>
<tr>
<td>Contextual explanation &amp; objectivist approach</td>
<td>Examining the proportion of women entrepreneurs across countries.</td>
<td>Examining the work-family experiences of female entrepreneurs.</td>
</tr>
<tr>
<td></td>
<td>(See e.g., Shinnar, Giacomin, &amp; Janssen, 2012 as cited in Hughes et. al., 2012)</td>
<td>(See e.g., Davis &amp; Shaver, 2012 as cited in Hughes et. al., 2012)</td>
</tr>
<tr>
<td>Individualistic explanation &amp; constructionist approach</td>
<td>Examining the notions of ‘entrepreneurship’ and ‘growth’ between men and women.</td>
<td>Comparative research (men vs women) on the construct of entrepreneurial opportunities.</td>
</tr>
<tr>
<td></td>
<td>(See e.g., James, 2012 as cited in Hughes et. al., 2012)</td>
<td>(See e.g., James, 2012 as cited in Hughes et. al., 2012)</td>
</tr>
<tr>
<td>Contextual explanation &amp; constructionist approach</td>
<td>Examining the processes by which resource acquisition is across various contexts.</td>
<td>Examining gender-role identities and emancipation.</td>
</tr>
<tr>
<td></td>
<td>(See e.g., Fairclough, 2012 as cited in Hughes et. al., 2012)</td>
<td>(See e.g., Datta &amp; Gailey, 2012 as cited in Hughes et. al., 2012)</td>
</tr>
</tbody>
</table>


The overview of key conceptual challenges and questions presented in calls for the inclusion of diverse voices in research on female entrepreneurship, thus supporting more potent and in-depth interpretations of female entrepreneurs. With that in mind, the following section offers an overview of the key feminist theories on entrepreneurship.
FEMINIST CONCEPTUALIZATIONS OF ENTREPRENEURSHIP

Most of the scholarly work on female entrepreneurs has had a subfield or niche status (Clark Muntean, S., & Özkazanç-Pan, 2015). If a researcher wishes to address gender (and not sex) “as the relational, processual or performative concept” (Henry et al., 2016, p. 232), a post-structuralist feminist and constructionist epistemology is necessary.

Contemporary feminist discussions on gender have shifted from binary understandings of male and female. Constructivists have enabled analyses which look at how gender is shaped and reformed through everyday practices, within organizational contexts, and so on (Orser et al., 2013).

Two most important and widely recognized perspectives informing the debates on female entrepreneurship are liberal and social feminist theory (de Bruin et al., 2010).

Socialist feminists recognize the life-long socialization processes that form women to be equal, but different from men in their perceptions of the world (ibid., 2010). Social feminism emphasizes the specific experiences, competencies, values and needs of women since men and women experience different socialization processes. Different experiences shape their masculine and feminine rationality and ways of understanding the world. Men are expected to show greater levels of autonomy, independence, self-confidence, self-assertion, and risk-taking, whereas women are likely to have lower entrepreneurial intentions (Camelo-Ordz et al., 2016).

Socialist feminism does not view female experiences as inferior, but as different. Consequently, such gender role differences should be recognized and accepted instead of ignored and/or removed (Clark Muntean, S., & Özkazanç-Pan, 2015). Unequal economic power relations arising from these differences (biological, social or other) should be acknowledged.

Liberal feminists say that men and women are essentially equal, and gender differences are the result of structural barriers or discrimination (de Bruin et al., 2010). In that sense, removal of different structural, institutional and legal barriers will enable women to have entrepreneurial outcomes equal to those of men. Although liberal feminism assumes gender equality, critics note that the male experience remains the norm of entrepreneurship and that liberal perspectives ignore gender inequities concerning work-life balance home and family (Clark Muntean & Özkazanç-Pan, 2015).

Aside from these two widely used feminist lenses (e.g., Calás et al., 2009; Orser et al., 2013; Lewis, 2013; Yadav & Unni, 2016; Camelo-Ordz et al., 2016; Outsios & Farooqi, 2017; Ali Sidi, 2018), Clark Muntean & Özkazanç-Pan (2015, 2016) mention also Marxist feminism, radical feminism, transcnational/postcolonial feminism, and post-structural feminism that will be outlined in the following paragraphs.

Marxist feminism highlights the requirement for the socialization of both childcare and household work in addition to complete equality in the paid labor force. This perspective is somewhat limited in relation to theories of entrepreneurship because it emphasizes paid labor, without focusing on self-employment. Moreover, the traditional Marxist ideas are somewhat contrary to entrepreneurial goals and a market-based capitalist system (Clark Muntean, S., & Özkazanç-Pan, 2015).

Radical feminists emphasize that men and women are inherently different, and that men have abused these differences to their own benefit. In the overly masculine entrepreneurial ecosystem, pro-female organizations and institutions are rare. Supporting the organization of female-only entrepreneurial structures such as incubators, educational programs, business plan pitches, and similar platforms is in line with radical feminist ideas (ibid., 2015).

In general, transnational and postcolonial feminism examines the living and working conditions of women (and men) in the “Third-World”. Under such a perspective, men remain over-identified with competency in the for-profit entrepreneurship, whereas women are more strongly identified with the social sector and with microenterprises.

Finally, poststructuralist feminism focuses on the researcher and discipline, noting that dominant masculine models are favoured and used, even if researchers are focused on closing the gender gap (Clark Muntean, S., & Özkazanç-Pan, 2015).

GENDER-INTEGRATIVE ENTREPRENEURSHIP

The following paragraphs offer an overview of two recent conceptual frameworks that differentiate the study of female entrepreneurship from general entrepreneurship and call for a gender–integrative entrepreneurship.

The first conceptual framework is the one proposed by Brush et al. (2009). The authors offer a gender-aware framework by building on an existing framework emphasizing the “3Ms” (markets, money and management) entrepreneurs need to launch and grow businesses. Grounding themselves in the institutional theory, the authors argue that the “3M” framework needs further improvement and they add the elements of “motherhood” and “meso/macro environment” to extend the framework. Hence, they build the “5Ms” framework for the study of female entrepreneurship. The framework is presented in Figure 2.
Additionally, Brush et al. (2009) showed that “motherhood” is a metaphor for the household and family dimensions of female entrepreneurship, which might have a stronger impact on women as compared to men. The meso/macro environment refers to elements beyond the market, such as societal and cultural norms (macro), and intermediate structures and institutions (meso). With their framework, the authors give insights on the importance of both individual and societal factors that influence female enterprises. Furthermore, they shed light on the need for an integrated approach, which is a key input for policy makers.

Another attempt at developing gender-integrative models of female entrepreneurship is proposed by Clark Muntean & Özkanaz-Pan (2015). Their model is presented in Figure 3.

**Figure 3: Model of Gender Integrative Approach to Entrepreneurship**


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The authors present the negative attributes or gendered stereotypes of male and female entrepreneurs and argue in the first two types that such positions should no longer be supported. The third list of attributes is positive and combines valuable and desirable traits for both men and women and their gender integrative enterprises. Furthermore, the authors acknowledge the social order and its gendered specifics. In that regard, the model has some valuable theoretical and practical implications that will also set the ground for the concluding remarks of this essay.

First, gender integrative approaches emphasize educational and governmental programs that have gender-neutral assumptions. The solutions for entrepreneurship must not be left solely at the individual level and must be addressed via national equality programs and funding.

Finally, awareness raising about the numerous cultural and societal, psychological and other barriers for female entrepreneurs needs to occur. Feminist organizations have to spur their activity in the fields such as venture capital, start-up and acceleration programs to influence social change and ultimately achieve gender equity.

THOUGHTS ON FEMALE ENTREPRENEURSHIP IN POST-SOCIALIST COUNTRIES

Entrepreneurship represents an identifiably masculinized construct within most of the extant entrepreneurship literature, with a focus on a particular form of masculinity (Galloway et al., 2015). More empirical work should aim at supporting feminist, post-structuralist approaches and gender integrative conceptualization, specifically in respect to gender-neutral language, imagery, and representations of what constitutes the ideal-type entrepreneur (Clark Muntean, S., & Özkazanç-Pan, 2015). This review essay has shown that there is a need for gender to be utilized not as a variable, but as a theoretical lens. The same logic applies for feminist theorizing in the female entrepreneurship field, as a subset of the entrepreneurship field. Furthermore, the paper has shown that the sub-area of female entrepreneurship has come a long way in a very short time. The paper has also shown that much of the work done in the field has focused on topics similar to those investigated by researchers addressing general entrepreneurship.

To further our understanding of women’s entrepreneurship, I suggest shedding light on the multiplicity of contexts for female entrepreneurship and providing an overview of contemporary approaches to the phenomenon by conducting a case study analysis of female entrepreneurship in a post-socialist setting. This research assumes that in order to explain the entrepreneurial behaviour of female entrepreneurs, the phenomenon of contextual embeddedness (Granovetter, 1985) should be addressed.

The rationale for choosing Slovenia or a similar post-socialist country (e.g., Croatia, Poland, Romania) as an empirical context stems from the experience of the institutional-economic transformation and transition that took place over the last three decades. Slovenia has faced specific changes following the historical fall of the communist regime. as a part of Yugoslavia, Slovenia developed market socialism – an economic system significantly different from the planned or state socialism of other transition countries across Europe (Szerb & Turnbull, 2016).

From a methodological perspective, the shift towards the feminist standpoint theories (FST) and post-structural feminism (PSF) call for more innovative study methods. Specifically, large-scale quantitative studies need to be integrated with qualitative studies, which will allow moving away from male–female comparative studies towards context-specific (e.g., sector, region and country) analysis with in-depth within-group comparisons. Further, researchers have to address sample robustness, data reliability, and analytical rigor; enhanced and gender-disaggregated datasets can accomplish that. Similarly, transparency concerning data sources, sampling and analytical techniques can help working with small samples. Triangulation also needs to be accounted for, to strengthen potential findings. However, a shift towards qualitative approaches has to be accompanied by an epistemological shift towards research on gender and gendering processes (Henry et al., 2016).

REFERENCES


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MANAGERIAL ACCOUNTING RESEARCH: THE CONTRIBUTIONS OF ORGANIZATIONAL AND SOCIOLOGICAL THEORIES
Lidija Romić

Abstract:
Organizational and sociological theories explicitly recognize the centrality of issues of social control and coordination in organizations, thus providing intellectual approaches from which study managerial accounting as important aspects of the manner in which organizations and society function. This paper examines various organizational and sociological perspectives which have provided meaningful contributions to our understanding of managerial accounting. The credibility of both the theoretical and methodological traditions which typically underpin these alternative organizational and sociological perspectives is then discussed. Finally, this paper considers the unique insights which organizational and sociological theories offer in contrast to more traditional managerial accounting research perspectives for understanding the multiple roles of management accounting in contemporary organizations.

Keywords: accounting, research, statements, theories

INTRODUCTION
Managerial accounting research which has adopted organizational or sociological theories to examine the development, maintenance and change in managerial accounting practices, explicitly recognizes the centrality of issues of social control and coordination in organizations, thus providing intellectual approaches from which to study managerial accounting as problematic aspects of the organizational and social context. The purpose of our paper is to provide a critique of the organizational and sociological theoretical traditions which have been used in managerial accounting research in order to facilitate understanding, and perhaps influence usage, by accounting scholars adopting more traditional research perspectives. In our effort to provide a sweeping critique of organizational and sociological perspectives, rather than a detailed and nuanced treatment of this stream of management accounting research from these theoretical perspectives, there are points of omission, under representation, and compression of the multitude of views within these theoretical traditions. An yet it is precisely through such a broad treatment that we hope to reveal the distinctiveness of these organizational and sociological research traditions which exhibit a cluster of tendencies that distinguish it from familiar research traditions which draw on neoclassical economics and contemporary social and organizational psychology.
The paper is organized into four sections. The first section addresses the contributions which contingency theory has had in situating managerial accounting in the control processes and structures of organizations. Contingency theory (Thompson 1967, Perrow 1967, Lawrence and Lorsch 1969) represents a rich blend of organizational theory – i.e., it has roots in the organizational decision-making perspectives of the 1950s (Simon 1957; March and Simon 1958) – and sociological functionalist perspectives of organizations – i.e, it has roots in the sociological concerns about organizational structure of the 1960s ( Burns and Stalker 1961, Woodward 1965, Aiken and Hage 1966, Hickson 1966 ). Contingency theory the insights on such critical organizational processes as decision-making and control as depicted in the literature on organizational decision-making and combined these with sociological functionalist concerns regarding the impact of such structural factors as environment, size, technology, etc on organizational behavior. Important to both the decision-making perspective of organizations and the sociological concerns for organizational structure are issues of organizational control and coordination. This explicit concern for issues of coordination and control in turn, has provided important contributions to managerial accounting research in our understanding of such issues as the design of information and control systems, budgeting and strategic planning.
The second major section of this paper deals with the various organizational and sociological theories which concern themselves with the social construction and spread of rationality in turn, the manner in which this rationality impacts the power of politics in organizational functioning (Weber 1947). These organizational and sociological theories – often referred to as interpretive perspectives – also draw from the organizational decision-making perspective (Simon 1957, March and Simon 1958 ) thus sharing intellectual heritage with contingency traditions beginning with the work of Weber (1947) and his concerns for the “politics of rationality” as well as the work of Berger and Luckmann (1967) and the manner which subjective meaning becomes objective facts. Specifically, we examine the relevance of interpretive perspectives by considering a number of organizational and social theories including institutional theories (Pfeffer 1981) political perspectives (Edelman 1977, Wildawsky 1964) and the sociology of professions (Abbott 1988, Freidson 1986).

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The third section of this paper examines the critical organizational and sociological perspectives which provide an even more direct explanation of power and politics. Perhaps, the most important attribute of critical perspectives is its attention to issues of conflict, domination and power – an attention motivated by a theoretical backdrop of capitalist social relations, and premised upon irreducible conflict between capital and labor which ensures perpetual antagonistic relations between the classes. Despite theoretical differences within critical perspectives regarding the manner and form in which to conceptualize power, a common attribute is that they eschew a consensus view of society. These critical perspectives argue that that functionalist and interpretive views of power stipulate that individual interests mesh into a harmony at the societal level which contrasts with the critical perspectives focus on presumed perpetual antagonistic relations between the classes. More specifically, whether through general equilibrium in economics (e.g. the functionalist concern for market value) or the public good in politics (the interpretive concerns for the negotiation and bargaining) the social interest is assumed to emerge from the interaction of individual interests. In sharp contrast, critical perspectives deal explicitly with the role that accounting plays in relation to issues of conflict, domination and power as defined by the presumed irreducible conflict between capital and labor (Cooper and Sherr 1984). Here we will confine out attention to two major research strands of many critical perspectives that have illuminated our understanding of managerial accounting: labor process theory which is concerned with the extraction of surplus from laborers (e.g., Hopper and Amstrong 1991) and the Foucaultian perspective which is concerned with the method by which the actions of individuals are made visible and susceptible to discipline and control, thereby rendering the individual to be governed (e.g., Miller and O’Leary 1987, Walsh and Stewart 1993).

The fourth section of the paper offers concluding remarks in which we consider relationship among the three dominant organizational and sociological theories considered in this paper, as well as their relationship to more orthodox, neoclassical, and social and organizational psychology perspectives of managerial accounting with a focus on the issue as to whether these various perspectives can be meaningfully blended or whether a “champion” perspective may emerge. This section also addresses issues pertaining to assessing the credibility of the field-based research methods commonly (but not necessarily) utilized in this alternative theoretical traditions. Finally, this section considers the unique contributions that the different organizational and sociological theories may make beyond those offered by more traditional approaches.

CONTINGENCY THEORY

Contingency theory has provided inspiration to managerial accounting researches through an elaboration of the basic theme that “tight” control systems should be used in centralized organizations faced with simple technology and stable task environments, “loose” control systems should be used in decentralized organizations, presumably faced with dynamic, complex task environments. Futhermore, a given means of control such as embedded in managerial accounting information can only be understood through reference to other control approaches used in organizations as well as their organizational/task environment context. For example, budgets may take on important meaning both for planning and control purposes for work processes or product lines which are more routine, standardized and predictable. However, in situations where the processes or product lines are less routine, less standardized and less predictable, the budgets may be generated but are subject to much revision and are of little use as a control benchmark (Swieringa and Mocnur 1975). Contingency theory is essentially a theoretical perspective of organizational behavior that emphasizes how contingent factors such as technology and the task environment affected the design and functioning of organizations. For example, Thompson’s (1967) Organizations in Actions attempted to link technology and organizational contingencies to various organizational arrangements, focusing particularly on the different mechanisms of coordination which were appropriate for more complex, dynamic technologies and task environmental conditions. Perrow’s (1967) theory of technology focused on the congruence between different types of technologies and organizational arrangements, emphasizing that more flexible, loosely-structured arrangements were more appropriate for organizations with non – routine technologies, while just the opposite type of organizational arrangements were more likely to fit routine technologies. Lawrence and Lorsch’s (1969) Organizations and Environment developed, in a related manner the fit between organizational arrangements including mechanisms of social control and coordination, and environments of organizations.

The sociological tradition embedded in contingency theory developed during 1960s through various “structural” approaches to organizational studied (Woodward 1965, Aiken and Hage 1966, Hage and Aiken 967, Blau 1970, 1973, Hickon 1966, Child 1972, Pugh et al. 1968) These studies suggested that organizations’ structures are contingent upon contextual factors which have been variously defined to include technology (Woodward 1965) dimensions of task environment (Burns and Stalker 1961) and organizational size (Pugh et al. 1969, Blau 1970). These contextual factors are hypothesized to influence dimensions of structure including the degree of formalization, specialization, differentiation and bureaucratization. Discussions of social control and coordination were sometimes elicited to explain some of the observed relationships among structural properties, but by a large, were not of a central importance. Not all functionalist theories of organizations developed during the period
presented such static images of organizations. Contingency frameworks for example, drew directly from this sociological functionalist theories of organization structure, while also sing March and Simon’s (1958) developed a complex macro-perspective of organizations that viewed them as flexible, loosely-coupled systems in which human choice ad voluntarism, and hence unpredictability, were major characteristics. The very essence of this decision-making perspective held that decision-makers in organizations are unlikely in cost circumstances to have the information they need and want, and therefore, that many if not most decisions are made under conditions of uncertainty. In short, the primary concern of the organizational decision-making perspective is for the treatment of the problematic “boundedly rational” person which in turn, is the core legacy passed onto contingency theory as it seeks to provide insight as to this boundedly rational decision-maker in relation to the various contingent contextual factors (technology, environment, etc) as suggested by the sociological structural perspectives. March and Simon’s (1958) depiction of the organizational decision-maker under such conditions of uncertainty was influenced by an earlier organizational theory tradition: the “human relations” approach to organizational analysis as developed in the work of Mayo (1933) and more concretely articulated by Barnad’s (1938) seminal work, The functions of the Executive. Perhaps the fundamental insight of this human relations approach in terms of its contribution to the organizational decision-making of March and Simon (1958), and eventually the contingency theory perspective, was that social and psychological attitudes were significant factors to be considered in the design of production processes and its related control systems. The human relations approach, in turn, extended the early scientific management work of Frederick W. Taylor was concerned with the rationalization of work in order to maximize efficiency and productivity and, hence, profits. Scientific management ushered in the monitoring of the individual worker, but ultimately contributed to the monitoring of work units within organizations as well. The fascinating issue which the human relations perspective brought forth (as compared to earlier scientific management work) and pervades through contingency theory was the depiction of corporations existing in a tentative equilibrium which is inherently fragile, short lived and ever subject to a complex of personal, social physical and biological destructive forces (Miller and O’Leary 1989). As Miller and O’Leary (1989) argued, it was axiomatic for the human relations perspective that all organizations are founded on self-interest and a contractual principle, this is the core reason that they are so fragile. This characterization of the organizations founded on self-interest and contractual principles becomes a major thrust of the organizational decision-making perspective as articulated in the work of March and Simon (1958) but also in the related work of Simon (1957) and the later work of Cyert and March (1963) and March and Olson (1965). In summary, March and Simon (1958) and the organizational decision-making perspective started with an image of human behavior and individual decision-making that was considerably more complex than the human relations perspective that had preceded them, but nonetheless, reflected a common concern for the managing of the organization. In turn, contingency theory blended the insights on human behavior and individual decision-making perspective with the sociological functionalist concerns regarding the impact of such structural factors as environment, size, technology, etc, on organizational control and coordination which are so germane to managerial accounting research. Traditional management accounting research which has been based in the contingency literature (as well as its predecessors – organizational decision-making, human relations and scientific management) suggests that managerial accounting information should reflect and promote rationality in decision-making. Accordingly, management accounting information used by managers serves as a quantitative expressions of organizational goals and are used to support rational decision-making (Ijiri 1965) The prescriptive character of managerial accounting information espoused by this traditional school of thought is essentially internal and downward and also prescriptive in character (Anthony 1965) thus reflecting the strong scientific management heritage, albeit later becoming more complex when sociological and psychological as well as structural factors are brought in. Among the earliest managerial accounting research which adopted a contingency perspective was Hofstede’s (1967) classic field work which found that economic, technological and sociological considerations have a significant impact on the way budgeting systems function, concluding that managers used budgetary information in difficult economic environments to pressure workers, but in more lucrative environments, the budget was used more in a problem solving mode. Golembiewski (1964) was also among the earliest to explicitly examine various aspects of organizational structure in relationship to the use of budgets. In this tradition, Hayes (1977) investigated the appropriateness of different departments in large industrial organizations, finding that contingency factors proved to be the major predictors of effectiveness for production departments. Extending this theme, Hirst (1981, 1983) examined external control factors such as environmental uncertainty and their impact on the reliance on accounting measures of performance. In applying contingency theory to control systems design, some researches have sought to uncover direct relationships between these contextual factors and organizations’ accounting and information systems (Khandwalla 1972). Technology also was specifically introduced as a major explanatory variable of an effective accounting information system by Daft and MacIntosh (1981). Others have articulated more subtle relationships between contextual factors, structural characteristics, and control system design (Gordon and Miller 1976) Waterhouse and Tiessen (1978) For example, Gordon and Miller (1976) hypothesized that accounting information systems could be designed to cope with environmental uncertainty by incorporating non
financial data, increasing reporting frequency, and tailoring systems to local needs (see also MacIntosh 1981, Ansari 1977) Dent’s (1987) focus was on the design of formal control systems in complex organizations, being concerned with question of appropriate contingency principles underlying the design of such systems. More recently, accounting researches have sought to extend contingency arguments to embrace relationships between firm’s strategies and the design of their control systems (see Govindaraj and Gupta 1985, Merchant 1985, Simons 1987). For example4, Kaplan (1983) reasoned that managerial accounting has served business inadequately, it has become overly simplistic, structured and misdirected. He urged a close scrutiny of organizational activity of successful organizations so that the managerial accounting systems adopted accurately reflect the complex conditions confronting contemporary organizations. Merchant (1981, 1984, 1985) found contingent relationships between corporate context (size, product diversity and extent of decentralization) and the uses of budgeting a major explanatory variable regarding the appropriateness of accounting data in evaluating the performance of business units. Govindarajan and Gupta (1985) extended the concern for contingency relationships between organizational control mechanisms and variables such as technology, environment and size, by exploring the utility of relating these contingency relationships to strategy, where the utility of a particular incentive bonus system is contingent upon the strategy of the focal strategic bonus unit. The work of Shank (1989) and Simons (1987) also are important research efforts which mobilized contingency principles in the examination of the use of managerial accounting systems and information in a strategic manner.

Reflecting concerns for the role of managerial accounting information in contemporary organizations, the work of McNair and Mosconi (1988) and MacNair et al. (1989) also reflects an implicit contingency tradition, finding that changes in technologies are accompanied by changes in performance management systems. Furthermore, McNair’s group (McNair and Mosconi 1988, McNair et al. 1989) found that actual costs have begun to replace standards in JIT environments manufacturing process. On this point, Foster and Gupta (1990) provided a cross sectional comparison of manufacturing plants in an electronic firm, arguing that contingency variables (size and complexity of cost drivers) affect manufacturing overhead. Patell’s (1987) longitudinal study of JIT implementation and changes in cost accounting procedures also highly the importance of contingency structural factors in the coordination problems of many new manufacturing operations with regards to information for control and evaluation. The impact of structural factors is also apparent in the work of Banker et al. (1991) who found that firms that have implemented JIT or other teamwork programs are more likely to provide manufacturing performance information to shop-floor workers. A contingency theme underlies Young’s (1992) work which raises the intriguing issue that power shifting can occur within the organization as a result of implementation of JIT. Here is argued that workers are given much more power under JIT then management may realize (i.e. worker’s strike could cripple them) because of the tight coupling that takes place (see Wilkinson and Oliver 1989). Finally, Selto et al. of JIT manufacturing and a total quality system (JIT/TQC system) when contingency literature, Selto et al. (1995) provided a rather comprehensive contingency perspective of the adaption of JIT manufacturing and total quality control system (JIT/TQC system) when they considered JIT in relationship to classical contingency theory constructs, organizational structure, context and control to get some sense of the fit of these organizational variables and the JIT system. Drawing from Drazin and Van dr Ven’s (1985) review of the extensive contingency literature, Selto et al. (1995) found contingency theory to have intuitive appeal in understanding broad issues of management controls, but also argued that the extensive interaction of variables as well as continuous changes in organizations would make it difficult to apply contingency theory.

The influence of contingency theory and its precursors theoretical traditions on managerial accounting research, however, have been criticized for presenting a deterministic, a historical view of organizations which provides limited insights as to mediating processes of organizations. Among the earlier critiques of the application of contingency theory in managerial accounting, Otley (1980) observed that reliance tended to be placed on a relatively few number of very general variables, task environment and structure, which in turn, were used to explain organization structure and design of managerial accounting systems. He argued that these variables tended to be ill-defined and measured, and were not comparable across earlier accounting studies, thus yielding fragmented results. Further, the proposal that the link between accounting systems design and organizational effectiveness was far from proven, Otley (1980) concluded that the remained a need to imbed accounting systems in the overall package of organizational control approaches, to develop more nuanced expressions of organizational effectiveness, and in general to move to a more complex expression of contingency framework. Also he observed that many of issues relating to the development of accounting systems, and the relationships with the organization’s differentiated environment, were political as opposed to technical in nature, and urged the application of a field study approach to examine these issues.

**INTERPRETIVE PERSPECTIVES**

By focusing on the management of complex relational networks and the exercise of coordination and control, contingency theory has adhered to the strong influence of the classical sociological functionalist perspectives (Durkheim 1938) at the cost neglecting alternative sociological theories such as expressed in the work of Weber.
(1947, 1958, 1964) whose primary concern was with the source of formal structure: formal structures. In contingency theory, legitimacy is given, assertions about bureaucratization such as the role of managerial accounting practices and information systems rest on the assumptions of norms of rationality. When such norms do play causal roles in theories of bureaucratization, it is because they are thought to facilitate formal organization. But norms of rationality are not simply general values. They exist in much more specific and powerful ways in the rules, understandings and meanings attached institutionalized social structures. The causal importance of such institutions has been neglected. According to Meyer and Rowan (1977, 343): Formal structures are not only the result of their relational network in the social organization... the elements of the rationalized formal structure are also deeply ingrained in, and reflect widespread understandings of social reality... Such elements of formal structure are manifestations of powerful institutional rules which function as highly rationalized myths that are binding on particular organizations. Strands of this Weberian sociological tradition are embedded in March and Simon’s (1958) organizational decision-making model which provides a key contribution in its focus on the routine, taken-for-granted aspects of organizational life. Traces of a cognitive orientation in Weber’s theory of bureaucracy – his emphasis relations – are apparent in the richness of March and Simons’s (1958) decision making model when they urged a focus on understanding the initiation and preservation of power relationships on two fronts: (1) the power to set premises and define the norms and standards that shape and channel behavior, and (2) the power to delimit appropriate models of bureaucratic structure and policy that go unquestioned for years. Weber’s concern was to understand the dominance of organizations and their forms of life. Weber reasoned that rationalization is concerned not only with the long term process of social structure transformation, but simultaneously and more importantly, the perpetuation, of existing power relations concealed in the advancement of rational imperatives. Thus, the critical issue is the politics of rationality itself. This concern for the power and politics of rationality is inherent in other interpretive sociological work such as Berger and Luckmann’s (1967). The Social sociological theory is: How is it possible that subjective meanings are infused with value beyond the technical understandings of social reality... Such elements of formal structure are manifestations of powerful institutional rules which function as highly rationalized myths that are binding on particular organizations. 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Further, Berger and Luckmann (1967) emphasized the importance of employing an historical approach, arguing that it is impossible to understand an institution adequately without an understanding of the historical processes in which it was produced. The result is the paradox “that man is capable of producing a world that he then experiences as something other than a human product” (Berger and Luckmann 1967, 61). Similarly, Garfinkel (1967) developed an approach to social investigation, ethnomethodology, which shifted the image of cognition from a rational, discursive, quasiscientific process to one that operates largely beneath the level of consciousness, a routine and conventional practical reason governed by rules that are recognized only when they are breached. To this he added a perspective on interaction that casts doubts on the importance of normative or cognitive consensus. Here Garfinkel (1967) argued that action is largely scripted and justified, after the fact, by reference to a stock of culturally available legitimating accounts. Interpretive perspectives and their underlying concerns pertaining to the cognitive decision-making issues of the organizational decision-making model the Weberian concern for the politics of rationality, and the ethnomethodological concerns for the construction of social reality, have perhaps been most forcefully developed within institutional theory. Following Selznick’s (1957, 17) definition “... to institutionalize is to infuse with value beyond the technical requirements of the task at hand” the general theme of the institutional perspective is that an organization’s survival requires is to conform to social norms of acceptable behavior as much as to achieve levels of production efficiency. Among the sociologists whose work reflected the Weberian tradition, Selznick (1957) viewed organizational structure as an adaptive vehicle shaped in reaction to the characteristics and commitments of participants as well as to influences and constraints from the external environment. Institutionalization refers to this adaptive process: the processes by which societal expectations of appropriate organizational form and behavior come to take on rule-like status in social thought and action. In particular, institutional theory extends beyond the focus of contingency theory on an organization’s task environment, which has received much attention in managerial accounting research, to instead focus on its institutional environment. According to Scott (1987, 507): Until the introduction of institutional conceptualizations, organizations were viewed as being shaped largely by their technologies, their transactions, or the power-dependency relations growing out of such interdependencies. Environments were conceived of as task environments. While such views are not wrong, they are clearly incomplete. Institutional theorists have directed attention to the importance of symbolic aspects of organizations and their environments. They reflect and advance a growing awareness that no organization is just a technical system and that many organizations are not primarily technical systems. All social systems, hence all organizations, exist in an institutional environment that defines and delimits social reality. The general theme of the institutional perspective is that an organization’s survival requires it to conform to social norms of acceptable behavior as much as to achieve high levels of production efficiency. Thus, many aspects of an organization’s formal structure, policies and procedures serve to demonstrate a conformity with institutionalized rules, thereby legitimizing it, to assist in gaining society’s continued support (Meyer and Rowan 1977, Scott 1987, DiMaggio and Powell 1983, 1991). Meyer and Rowan (1977) proposed that such externally legitimated, formal
assessments criteria as managerial accounting information play a heightened though ritualistic role in a variety of settings as organizations grope to find, conform to, and demonstrate for their internal and external constituents some form of rationality in order to gain legitimacy. Thus, rather than merely representing some notion of an objective reality, managerial accounting may serve as a ceremonial means for symbolically demonstrating an organization’s commitment to a rational course of action. Here accountants gain their power by the responsible development and application of generally legitimated categories. Similarly, Zuzker (1977) argued that the rationalization in formal control systems is an important part of a network of political and power relations which are built into the fabric of social life, a process of transforming the moral into the merely factual. Covaleski and Dirsmith (1988b) adopted an institutional perspective to examine the manner in which societal expectations of acceptable budgetary practices are articulated, enforced and modified during a period of organizational decline. They examined a large university system’s budgeting process both through extensive archival documents and through in depth interview with budgetary actors (see also Covaleski and Dirsmith 1983, 1986 for work pertaining to health care settings). Covaleski and Dirsmith (1988a, 1988b) followed a university budget category through periods of ascent, transformation and decline, describing the process of how a university challenged and rejected a traditional institutionalized budgetary framework for allocating state funding when this framework became inconsistent with the university’s goal and interests. Self–interest is foremost in the minds of the various parties who propose, oppose, co-opt and contest the budget category. Covaleski and Dirsmith (1988a, 1988b) show how conflicting interest get couched in the common and legitimate language of budgeting, thus concluding that the budgetary process is an important manner in which societal expectations are reproduced. Ansari and Euske (1987) also drew from institutional theory to examine the role of accounting information in the public sector, identifying this role in terms of documenting institutional compliance, i.e., seeking external legitimation or masking underlying sociopolitical reality. Ansari and Euske (1987) examined the manner in which cost information is used in the Department of Defense, finding disparity between the formally stated objective of the system to improve organization efficiency, and the lack of accounting system use for this purpose. The authors drew from an institutional perspective to explain the use of accounting information in the Department of Defense, in the light of this agency having ambiguous missions that foster rationalizing uses of accounting information. Mezias (1990) examined the financial reporting practices of the Fortune 200 and concluded that the institutional model adds significant explanatory power over and above the models that currently dominate the applied economics literature. Recognizing the institutional work that has been done pertaining to the accounting practices of not-for-profit organizations, Mezias (1990) studied relationships between institutional variables and the financial reporting practices used by for-profit organizations. Mezias and Scarselletta (1994) extended this work by examining the decision process of a public policy task force that that plays a role in establishing financial reporting standards to determine the affects of the kinds of decisions made. Drawing upon institutional theory, this study modeled the decision process as an organized anarchy embedded in a larger institutional context of accounting.

In summary Carruthers (1995) argued that institutionalism views accounting practices as one of a larger set of features that can legitimize organizations through the construction of an appearance of rationality and efficiency. As Carruthers (1995,326) stated " Accounts are the quintessential rationalized myth, and it is surprising that new institutionalists have no devoted more time to studying them. " Perhaps the single most important contribution of institutional theorists to the study of of organizations is their reconceptualization of the environments of organizations. Earlier organizational and sociological models had emphasized technical facets. Meyer and Rowan’s (1977) work, however, called attention to a neglected facet of environments. They emphasized (drawing from Berger and Luckmann 1967, Garfinkel 1967) that shared cognitive systems, although created in interaction by humans, come to be viewed as objectified and external structures defining social reality. This is an ethnmethodological view of human action as shaped by conventions, built up by participants in the course of interactions to the point that much behavior takes on taken-for-granted quality. The more institutionalized by a widening sphere of taken-for-granted routines (Weber 1947). Reflecting a theme similar to institutional theory, resource, dependency theorists argue that organizations are limited by a variety of external pressures ( Pfeffer and Salancik 1978, Pfeffer 1981 ) that environments are collectivities and interconnected, and that organizations must be responsive to external demands and expectations I order to survive. Resource dependency theorists also suggests that organizations attempt to obtain stability and legitimacy, and that organizational stability is achieved through the exercise of power or control for purposes of achieving a predictable inflow of vital resources and reducing environmental uncertainty ( Oliver 1991). In this tradition, Weick (1976) stated that the chief responsibilities of organizational administrators are to provide a common language from which to reaffirm a solidify ties with outsiders through symbol management, consistent articulation of a common vision, and interpretation of diverse actions in terms of common themes. In like manner, Burns (1986) observed that such “rule systems” as formal control systems, rather than being neutral or merely technical in nature, constitute power resources that actors use in advocating organizational structural forms which serve their own interests. On this theme, Boland and Pondy’s (1983, 1986) accounting studies highlight the ceremonial, seemingly irrational, aspects of resource allocation activities where, for example, they found in an university case, the budget provided a context for state agencies to
exercise their legitimate authority in allocating funds to particular priorities. At the same time the underlying flexibility was such that funds could be diverted from one program to another at will. In short, resource dependency theorists also have placed a strong emphasis on the role of political language, particularly in budgeting processes. Generally, the resource dependency tradition has recognized that budgeting is closely linked with power, self-interest and political advocacy in contemporary organizations (Pfeffer and Salancik 1974, 1978, Salancik and Pfeffer 1974, Rose 1977, Pfeffer 1981, Schick 1985). More specifically, self interest and internal power and politics, actively expressed, for example, through budgeting systems, have been found to play heightened roles during periods of organizational decline in terms of resource allocation decisions made within organizations, possibly so that the organization maintains some semblance of subunit harmony (Hackman 1985, Hills and Mahoney 1978, Gray and Ariss 1985). In addition, not only do organizations appear to use budgeting in a political mode to allocate resources internally, but the visibility of these internal budgetary allocations to external constituents also appears to influence the generation of resources (Hackman 1985). This dual role of budgeting in generating and allocating resources suggests an expanded linkage between the values of external constituents and the internal resource needs and uses of an individual organization, most particularly in times of financial stress. Cyert and March (1963) have defined budgets as both the substance and result of political bargaining processes that are useful for legitimizing and maintaining systems of power and control within organizations. Similarly, Pfeffer (1981) argued that a particularly effective way of influencing resource allocation decisions is to mechanism of the budgetary process which tends to legitimate subjective and political decision-making processes (see also Pfeffer and Salancik 1974, 1978). Here, according to Hopwood (1974) the trivial, dull, seemingly objective nature of accounting enables it to be used in taking the debatable out of the realm of open debate and into the realm of calculation. Consequently, these theorists considered managerial accounting information such as budgeting as a socially constructed phenomenon rather than a technically rational function driven by and serving the internal operations of organizations. Moreover, these perspectives recognized that once implemented, what a budgeting system accounts for shapes organizational members’ views of what is important and, more radically, what constitutes reality. Budgeting, then, has been implicated in the construction of social reality rather than being the passive mirror of a technical reality. On this point, Pfeffer (1981, 184) concluded: The task of political language and symbolic activity is to rationalize and justify decisions that are largely a result of power and influence, in order to make these results acceptable and legitimate in the organization.

Regarding the political perspective of budgeting Wildavsky (1964, 1975, 1979) long argued that budgeting systems achieve many purposes beyond control, that they are not at once forms and sources of power, and they serve both the guardians of scarce resources and the advocates of budgetary units. Wildavsky also reasoned that inherently conflictual organizations may use budgets in establishing and maintaining existing power relations as opposed to serving decision-making and problem solving directly in a technically rational manner. Instead, he argued, decision-making and problem solving are served by the sometimes asymmetrical political confrontation between budgeters and budgetees. Wildavsky concluded that the political nature of budgeting may well be inherent in complex organizational life, and is not the consequence of dispassionate analysis, but emerges through a subtle role of advocates and guardians. Building on Wildavsky’s analysis Jonson (1982) sought to capture some of the implicit political dynamics by following the way in which the budgetary process unfolded over three years in a Swedish municipality in a time of financial stringency.

Edelman’s (1977) broader political view and his concern for probing the consent of the governed in American politics also reflects concern for the significance of power and language. He argued that power relationships are seen as being reflected in daily life through the use of language, myths and symbolic displays directed at maintaining the status quo. Viewed as a form of language, quantitative data is selectively deployed by the state not to reflect underlying economic conditions, but to create public values acquiescence and support. As Edelman (1977, 58) observed: Language is always an intrinsic part of some particular social situation, it is never an independent instrument or simply a tool for description. By naively perceiving it is a tool, we mask its profound part in creating social relationships and is evoking the roles and the selves of those involved in the relationships. Consent of the governed, then comes about not from the conscious acceptance of rules of procedure, but as acquiescence to and taking for granted an accepted language, thus at once creating and supporting a hierarchical relationship between the governed and the state. Always cloaked in the appearance of objectivity and neutrality, this language is ultimately directed toward establishing and maintaining hierarchies of authority and status (Clegg 1987). This acceptable discourse, such as accounting information, is always an intrinsic part of some particular social situation, it is never an independent instrument or simply a tool to be assessed for such attributes as its representational faithfulness. On this point, Scott (1987, 509) emphasized that: Outcomes will… be strongly shaped by the agents’ differential ability to lay successful claim to the normative and cognitive facets of the political processes; those identified by such concepts as authority, legitimacy, sovereignty. Finally, Abbott’s (1988) work on professions can be meaningfully integrated into the concern of interpretive perspectives. Here Abbott has observed both that the professions seek to legitimize themselves to society by attaching their expertise to the widely held values of rationality, efficiency and science, and that a key characteristic lies in the use of power both externally to preserve an abstract system of knowledge and, more importantly,
internally in terms of hierarchal stratification and differentiation (see also Sarfatti-Larson 1977). Joining Abbott is recognizing the importance of power, Freidson (1986) alluded to a decoupling between the administrative or formalized and structurally oriented component of professional bureaucracies and the practitioner component comprised of those possessing and using internalized values and norms. Objectivity, having a close association with scientific endeavor, encodes expertise in an organizational structure and away from individuals (Freidson 1986, Abbott 1988). Both authors pointed to the necessity of conducting research at the micro-level of everyday practitioner experience, where self-interest may come into play, in order to understand professional endeavor. Abbott (1988) lamented that insufficient attention has been directed at studying professionals, not as freestanding autonomous agents, but as members of organizations, particularly for professions arising out of a commercial enterprise such as accounting. Abbott’s (1988, 226-235) findings suggest that in the early twentieth century, U.S engineers battled accountants for professional jurisdiction over the growing volume of quantitative work associated with corporations, a battle won by the accountants who won control and established a professional monopoly (Loft 1986, see also Armstrong 1985) In summary, interpretive perspectives of managerial accounting and organizations take issue with the assumption of an objective reality, arguing that the implementation of such apparently rational, bureaucratic mechanisms as managerial accounting systems is one of manner in which the social world flows through organizations and changes them. These theorists have begun to see managerial accounting practices and information as socially constructed phenomena with the full implications of the power and politics of social construction rather than as a technically rational function driven by and serving the internal operations of organizations. Furthermore, these interpretive perspectives recognize that once managerial accounting practices and information are implemented, what it accounts for shapes organizational members’ views of what is important and, more radically, what constitutes reality. Managerial accounting, then is seen as being implicated in the social construction of reality rather than as being passively reflective of the reality as depicted in contingency theory and its predecessors.

Although the trust of the interpretive perspectives in general and institutional theory in particular have received a growing amount of empirical support, a number of useful criticisms of them have been offered. DiMaggio (1988), for example, have used the term “institutionalization”. Institutionalization as an outcome places societal expectations and organizational structures and practices beyond the reach taken for granted (Perow 1985, Powell 1985). By contrast, institutionalization as a process may be profoundly political and reflects the relative power of organized interests (see also Tolbert 1988, DiMaggio and Powell 1991) Within this concern can be defined in terms of finding some mechanisms that can be mobilized by interested actors to change an overly stable social system (DiMaggio 1988) or in terms of finding some process wherein social order is produced in a system where organizations are constantly eroding (Zucker 1988)> Regarding power and group interest, DiMaggio (1988) has observed that institutional and interest-based explanations of organizational practices are not necessarily antagonistic to one another, but combined, may yield a more comprehensive theoretical apparatus for gaining insight into the social dynamics of organizations. He concluded that allusions to power and group interests tend to be smuggled into the institutional perspective rather than provide the focus of a sustained theoretical analysis.

CONCLUSION

It is important to note our interpretation of the relationship among the alternative managerial and sociological theories considered, as well as their relationship to more traditional perspectives of managerial accounting: can these various perspectives be compared and contrasted or possibly blended, and a “champion” paradigm isolated? In exploring the structure of more general scientific revolutions, Kuhn (1970) reasoned that because of fundamentally different philosophical presumptions, it is impossible to employ the tenets of one paradigm to assist those subscribing to a second paradigm to transition to understand the first paradigm. But rather, the “leap” from one paradigm to another must be based on faith in in order to fully appreciate what a particular paradigm may offer for understanding our existence. In this spirit, and more closely concerned with organizational analysis, Morgan (1980) (see also Burrell and Morgan 1979, in accounting see Dirsmith et al. 1985) theorized that different paradigms both address different sorts of problems and, where paradigms address common problems, portray them in fundamentally different ways and thereby offer differing insights into their nature. Thus, what is called for is not a blending of paradigms nor the isolation of a particular paradigm as champion, but rather paradigmatic pluralism as a way of enhancing our understanding of issues in the social sciences. Consequently, we offer the various paradigms not as competing perspectives but in some sense as alternative ways of understanding the multiple roles played by management accounting in organizations and society.

Extending this theme and drawing upon Churchman’s (1971) characterization of influencing systems, Mitroff and Mason (1982) offered a useful way to understand the properties of more orthodox research approaches and one which calls for a plurality of theories used in a dialectic fashion. The argument of Mitroff and Masson (1982) also highlights fundamental differences in the types of problems which may be addressed. Within the traditional approach to management accounting research, one seeks regularity, consistency or consensus by two means. In the first one seeks patterns in specific sets of empirical data in a purely inductive mode. “Consensus” of data is in essence a
guarantor of faithfully representing a concrete reality. Any lack of regularity or consensus in the data (e.g. low r2) serves to question the validity of pattern isolated or theory used. One seeks improved understanding by refining the model’s specification. In the second approach, one seeks internal consistency in a postulational system wherein reality is the axiomatic structure. In a deductively driven system, only the lack of internal consistency or conflict in the propositional network can cause one to abandon it in favor of a competing network. The rational frame of reference importantly assumes that the phenomena under investigation are either well specified and well known, or able to be well known through some preliminary fieldwork (Keating 1995), or further refinement of the model of propositional network, and hence, are eminently structurable. However, because of its reliance on a set of fixed concrete data or variables expressed in a fixed postulational structure, it is limited in its abilities to preserve or reflect anomalies and uniqueness in phenomena and to capture the essence of ill structured problems. Its use, therefore, relegated to examining well structured though perhaps technically complex problems. Paradoxically, because of their very comprehensiveness, these traditional perspectives tend to suppress conflict, anomaly and uniqueness. By contrast, a more interpretive or critical view emphasizes the use of multiple conceptual views of ill structured, anomalous phenomena on the presumption that reality is too ill structured to be meaningfully represented by any set of data or propositional network, no matter how comprehensive they may appear. The use of alternative research theories also has resulted in alternative research methods of forms of inquiry. The general literature which describes the use of qualitative, naturalistic methods in field research is growing in volume and stature. From this literature, it is possible to outline various criteria of “good” research which are provisionally consistent with the knowledge claims advanced by its theoretical perspective discussed in the paper (Morgan 1983) sounds a useful warning note in such matters. However, we avoid detailed treatment of such philosophical issues as epistemology, or such methodological issues as falsification, or indeed of research methods. These and related matters have been adequately dealt with in both the philosophy of science and accounting literatures.

REFERENCES