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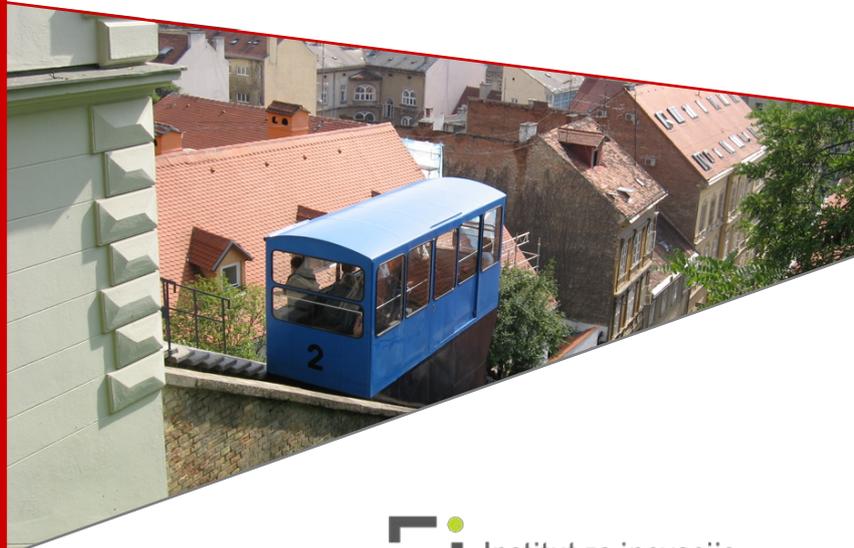
Growing in Shrinking Markets

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**7<sup>th</sup> ANNUAL GLOBAL BUSINESS CONFERENCE**  
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## The Effect of the Arabic Language and Local Female Custom on Expatriate Management

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### Abstract

**Purpose** – An increasing number of managers are working in overseas organizations. Many face difficulties managing the local staff due to cultural differences. Increasing leadership awareness is required to enhance expatriates' abilities to address cultural differences to enable a smoother working experience. The article provides comprehensive insight and guidance for those leaders who intend to undertake employment in the United Arab Emirates (UAE).

**Design/methodology/approach** – Interviews are utilized to explore the factors relating to UAE culture that effect expatriate leader management. Practical experiences of expatriates in relation to UAE cultural factors are highlighted.

**Findings** – Our findings show that Arabic language and custom of female dress affected expatriates' management in the UAE culture. A number of strategies are provided based on expatriates' experiences.

**Practical implications** – This research provides a greater comprehension of the effects of the UAE national culture on expatriate leaders' management of local staff. It offers practical examples related to the UAE culture and how to apply the lessons learned in workplace situations to avoid misunderstandings created by cultural differences. This will improve expatriates' management of staff at the strategic level.

**Originality/value** – This article adds to the field of research in cross-cultural management and human resources by focusing on cross-cultural leadership, specifically in the UAE. Much research has been conducted relating to cross-cultural management. Fewer studies have been undertaken on cross cultural management in UAE organizations.

### Keywords

Expatriate leadership, cross-cultural management, Islam, Arabic language, time management, custom, UAE

## Dealing With Problems in Natural Resources Industry

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### **Abstract**

Using natural resources and shaping them according to their needs, man has survived and evolved as a cultural, social and spiritual being. The development of technologies enriched the life of a modern man, but it led to the faster exploitation of its environment and the rapid depletion of resources. People have changed the face of the Earth more than any other species in the history - and the speed of these changes is increasing. Natural resources planning and dealing with the problems in this industry is complex and include a combination of economic, environmental and social objectives. We will present methodological framework that can help experts and researchers, especially operations researchers, to efficiently and effectively deal with problems in natural resources industry in order to solve them.

### **Keywords**

Natural resources, operations research

## 1. Introduction

Natural resources are the base of all activities and the survival of the human race itself. The basic natural resources functions are often presented as two functions. The first one is that resources provide the raw materials used to produce goods and services and this function is often referred to as a *source function*. Natural resources or the environment function can be a receiving medium for the waste originating from production and consumption and this function is often referred to as the *sink function*. Natural resource industry or natural resource management is trying to deal with problems in this field regardless of the function or a type of the resource, but considering the two effects that are of the most interest:

- Depletion of resources. It may be a result of over exploitation of renewable resources, as use will reduce the total stock of non-renewable resources.
- Degradation of resources. The waste or side-effects of consumption and production processes may degrade natural resources and a reduction in the level of physical and environmental services will result. (European Commission, 2012).

In order to better understand the natural resources industry and its aspects, in the table 1 are presented two common classifications of natural resources.

*Table 1: Classifications of natural resources*

Classification according to (de Zeeuw, 2000)	Classification according to (Weintraub et al., 2007)
Non-renewable and non-recyclable resources, such as fossil fuels	Mining
Non-renewable but recyclable resources, such as minerals	Mining
Slowly renewable resources, such as forests	Forests
Quickly renewable resources, such as fish Environmental resources, such as air, water and soil	Agriculture, water resources and fishery
Flow resources, such as solar and wind energy	Within the above four defined areas

Some types of natural resources are non-recyclable, so it is of great importance to deal with problems that include these types of resources in a matter that will provide its best protection and preservation.

Today societal concern has increasingly shifted towards the degradation of environmental resources. Due to increased human consumption and population pressure, these resources are becoming increasingly scarce and degradation of environmental resources is generally seen as the major threat to mankind. This concerns e.g. loss of biodiversity and the possible impairment of life-supporting ecosystems (European Commission, 2012).

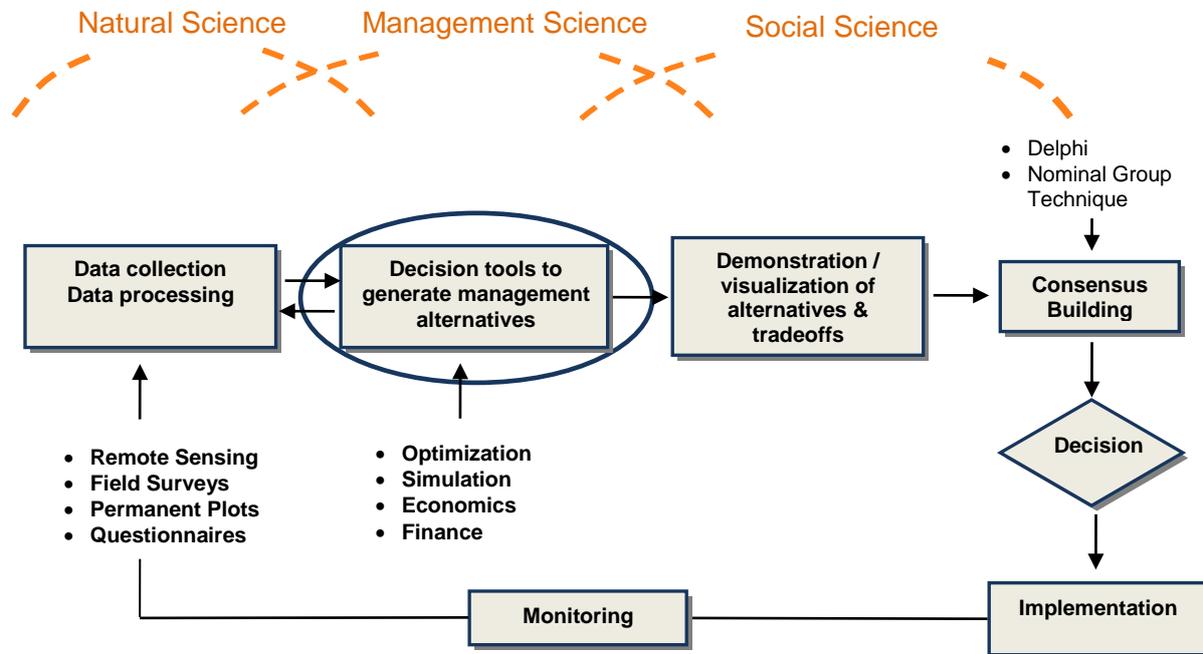
It is interesting to mention The Club of Rome and its study *The Limits to Growth* (Meadows et al., 1972). The Club of Rome drew the attention by pointing out the finite resource supplies and predicted exhaustion of the several major resources within decades. Some of these claims have proven to be wrong. Firstly, the actual reserves of these resources have proven to be much larger than the original estimates. Exploration and production technology has improved and thereby increased recoverable reserves and new reserves are being continually found. Secondly, the use of resources has not grown as fast as was originally predicted due to technological development which led to increased resource efficiency, the development of substitutes and increased levels of recycling. If a resource becomes scarcer, the price will tend to rise, promoting search for new discoveries and inducing reductions in demand (European Commission, 2012).

Operations Research/Management Science approaches have helped people for the last 40 years or so, to understand the complex functioning of the systems based upon natural resources, as well as to manage this type of systems in an efficient way. The areas usually viewed within the natural resources

field are: agriculture, fisheries, forestry, mining and water resources. In the research studies the problems within these four areas are mainly observed, analyzed and solved separately, regardless of the fact that there are clear links between them (Weintraub, 2007).

The decision making process in the natural resources industry can be shown as in figure 1 (Tóth, 2015).

Figure 1: The decision making process in natural resources management



Regardless of the similarities and differences between the various types of natural resources, it is essential to ensure their efficient use, and this can be achieved by improvement in any part of the decision-making process shown in Figure 1.

Efficient usage and planning of resources (consumption rates and emissions) prevent further deterioration of the environment in the future. It's crucial to try and remove or reduce existing damage where and when is possible. For this purpose, mathematical programming offers a full range of modeling techniques for modeling interaction between man and the environment taking into account all activities related to natural resources and their use, in order to find alternative courses of action, and in order to obtain optimal solutions for various problems.

## 2. Operations Research and Natural Resources

Population growth and industrial production, consequently lead to pollution increase, land degradation, habitat fragmentation and unsustainable consumption, and thus jeopardized the integrity of the global ecosystem of planet Earth. Management programs for the protection of ecosystems, which are directed only to the management of forest funds and the wild animals, are not sufficient to respond to the growing negative impact on the limited natural resources of our Planet (Petrović et al., 2012).

Field of natural resources includes a variety of areas related to agriculture, forestry, mining and water resources. Though usually viewed separately, they share common problems, such as ecological concerns, use of scarce resources, and sustainability (Gas & Fu, 2013).

Since the nineties, many natural resources are beginning to reach or exceed sustainable levels of exploitation, or in the case of non-renewable resources there are limits on known reserves. The new awareness of the need to preserve natural habitats, protect endangered species, provide water and air quality, and promote biodiversity has come into the focus of researchers. This has often led to serious conflicts between production goals (with the need to derive efficient production processes) and ecological impacts, with increased public participation in decision processes. In this context, operations research and management science have played a significant role in managing natural resources (Gas & Fu, 2013).

The development of various technologies led to rapid exploitation of environment and the rapid depletion of resources. People have changed the face of the Earth more than any other species in the history of the planet - and the speed of these changes is increasing.

In (Meadows et al., 1972) the authors formulated the model of economic and population growth on Earth that takes into account the limited resources of the planet and they have simulated the interaction between the planet and the man. In their model five variables are included: human population, industrialization, pollution, food production and consumption of resources. The authors explored the possibility to achieve sustainable development by changing trends of growth variables. One of the conclusions of the authors is that if this development trend continues in the next 100 years (it was after almost 50 years since the release of the book), we will reach the limits of development of our planet.

## 2.1. Framework

A large number of papers regarding application of operations research in the field of natural resources are published. Some researchers have given the methodological framework of the literature review, in order to define a way to single out only those articles which are of major importance for researchers.

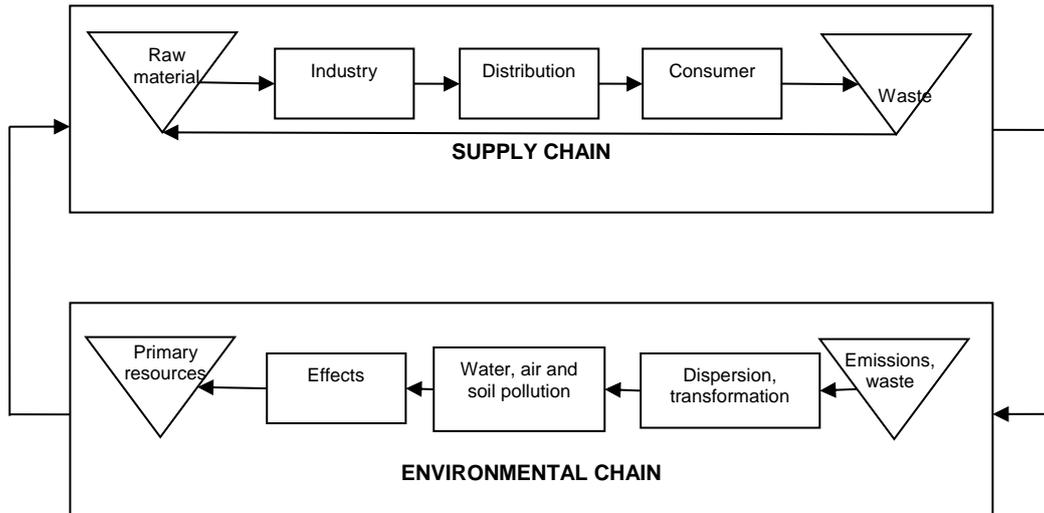
The framework given in (Bloemhof-Ruwaard et al., 1995) is very interesting. The authors propose two ways of looking at the interaction between operations research (OR) and environment management (EM):

- Impact on the supply chain. There is a need to adapt OR tools in order to deal adequately with a new situation requiring green supply chain modeling.
- Impact on the environmental chain. The amount of waste and the level of emissions caused by the supply chain result in a number of serious environmental effects, such as global warming and acid rain. The interaction between OR and EM can result in a clear formulation of these problems and in new insights in the impacts of alternative policy measures (Bloemhof-Ruwaard et al., 1995).

The framework considering the supply chain and the environmental chain is presented in Figure 2 and points out opportunities for OR.

Literature regarding environmental chain follows production activities that are focused on preventing or control of side effects of pollution. On the other hand, literature regarding environmental chain follows human influence on ecosystem. Any activity in supply chain can have a negative impact on the environment. And, at the same time, any disbalance of the ecosystem can, and have an impact on the production activities in the supply chain (Bloemhof-Ruwaard et al., 1995).

Figure 2: The framework



Source: Bloemhof-Ruwaard et al., 1995

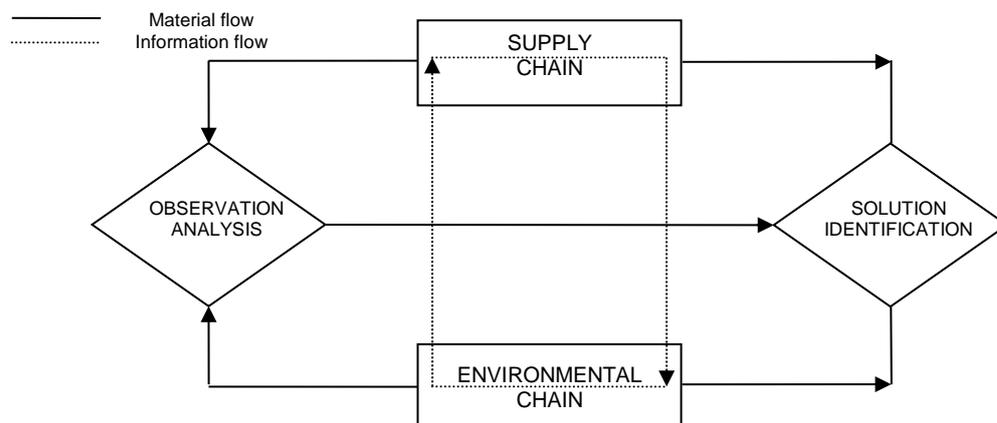
It is clear that no strict boundaries exist between the two stages presented in figure 2 since the information provided by the first one is essential to deal with the other, while there are OR contributions covering both stages (Daniel et al., 1997). Figure 3 shows this information flow through the supply and the environmental chain.

Daniels et al. (1997) suggested extension of the framework presented in figure 2 by adding two phases (figure 3):

- observation analysis and
- solution identification.

The phase observation analysis refers to the identification and the problem analysis in the supply chain or in the environmental chain, and data collection. The phase solution identification refers to the formulation and solving of mathematical model.

Figure 3: Extension of the framework



Source: Daniel et al., 1997

These two approaches are, in the first place, used to literature review and its classification, but they can help us notice the interaction between environmental problems and operational research. This interaction is crucial in order to efficiently solve many problems in the natural resources industry using operations research methods. Supply chain approach is mainly guided by the principles of technical

sciences, and a proposed extension (figure 3) brings together into the focus social sciences as well as technical sciences.

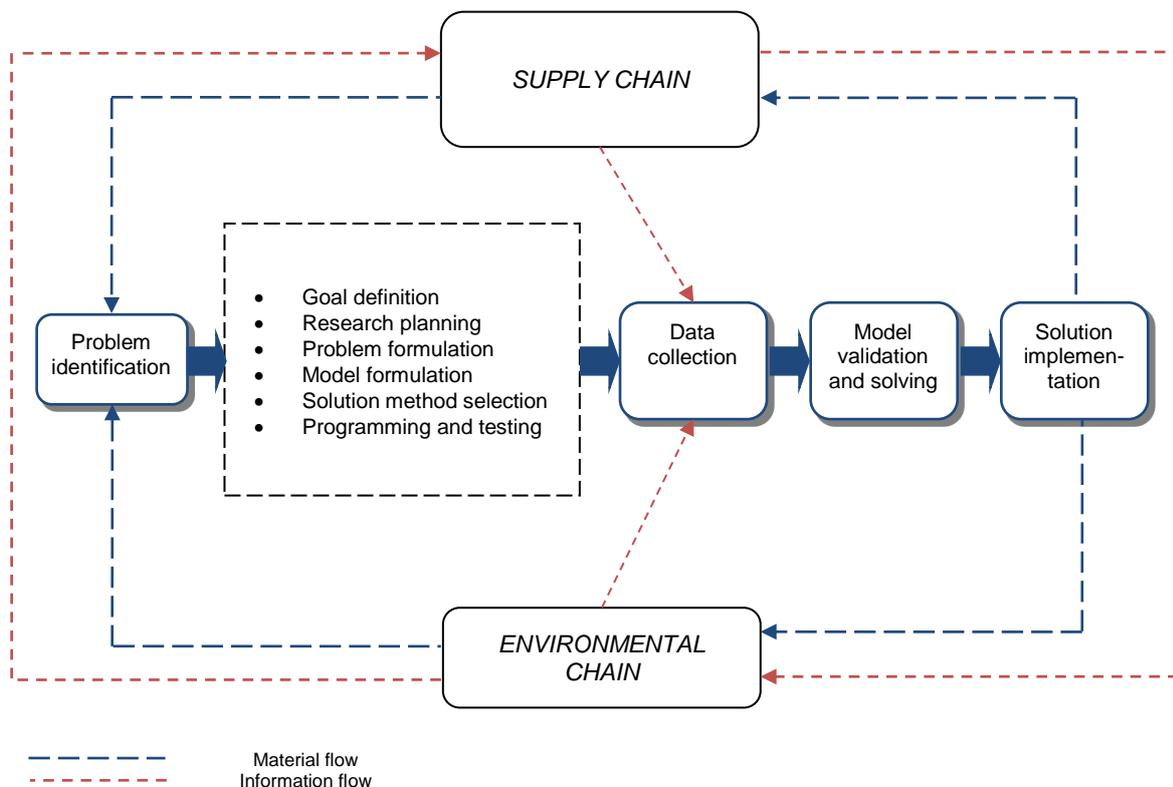
The phases observation analysis and solution identification are a part of the entire process of building mathematical models, and this process can be presented throughout nine phases (Krčevinac et al., 2012a):

1. Goal definition,
2. Research planning,
3. Problem formulation,
4. Model formulation,
5. Solution method selection,
6. Programming and testing,
7. Data collection,
8. Model validation and
9. Implementation.

Following the entire process of building mathematical models is very important for the successful application of operations research in the natural resources industry.

We propose a framework which can help researchers in the process of solving the problems in natural resources industry with operations research tools (figure 4).

Figure 4: Proposed framework



Accordingly to framework presented in this paper (Figure 4), the research studies in the field of natural resources can be roughly classified into two groups:

- Studies that are dealing with problems in the supply chain in order to better (economically) use natural resources,
- Studies that are dealing with problems in the environment in order to protect natural resources from an ecological point of view.

In our opinion, clear dividing line between the two groups does not exist, and every research within this field must have a link to the supply chain and to the environmental chain. Some research are completely oriented towards economic aspects of natural resources exploitation, and some research are considering the ecological aspect by including some additional factors.

### 3. Conclusion

The proposed framework brings up two, on first sight, different ways of dealing with problems in natural resource industry. Some researchers are solving natural resources problems driven by supply chain and its effects, and some are driven by environmental effects. In order to achieve the best results, it's important to comprehend effects of and on both chains, throughout the entire process of building mathematical models - from the problem identification to the solution implementation. The researchers should bridge the gap between the economic criteria of natural resources exploration and unwanted negative impacts of exploration on the environmental chain.

Future research trend should include and at the same time analyze economic effects and environmental effects of the problem solution. It is important to consider the natural resources problems in relation to the entire environment.

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## **Strategic Planning and Strategic Management Process in Hospitals and Attitudes and Behaviors of Hospitals Managers**

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### **Abstract**

The aim of this study is to determine the current situation of the strategic planning and management in hospitals. This descriptive study has been conducted in 8 public hospitals to 81 hospital managers. Managers were asked to answer a questionnaire consisting of 28 questions. The data which were collected with technic of survey were converted with the program SPSS 21.0 to quantitative and measurable data.

61% of managers according to the answers given in the survey have stated that their hospitals have a strategic plan, and on the other hand 94% of them believe in the necessity of strategic planning for their hospitals. Furthermore they have stated that 81.5 % of them are using status quo strategic plan and contrary to 70 % of them have stated that they have growing strategy in their hospitals. It was seen that while making a strategic plan hospital managers are taking into account internal and external environmental factors, are implementing analysis methods, techniques and mixed strategic planning model.

### **Keywords**

Strategic planning in hospitals, strategic management, managers attitudes

## I Miss You! Tattoo Attachment, Nostalgia and Consumer Well-being

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### Extended Abstract

#### 1. Introduction

On a marketing perspective tattoo can be seen as a type of consumption (Kjeldgaard & Bengtsson, 2005; Follet, 2009; MacKendrick, 1998). In this study, we investigate the relationship between attachments, nostalgia and consumer well-being through tattoo consumption. To understand this phenomenon we based our argument on attachment theory postulated mainly by Bowlby (1969). This theory has been used in psychology studies (Allen & Land, 1999; Bartholomew & Horowitz, 1991; Coan, 2010; Fraley & Shaver, 2000). The cornerstone of this theory is that, when a person feels bad or weakened their attachment systems are activated and they become motivated to seek protection and support through proximity to their attachment figure (Gillath, et al., 2006). In our opinion, tattoos serves as attachment figure to people recuperate their emotional well-being. Therefore, we believe that tattoos are representations of memories and need of an attachment figure in an adult stage.

Studies in marketing have given cues about attachment phenomenon between brands and consumers (Belaid & Behi, 2011; Chavanat & Martinent, 2009; Dunn & Hoegg, 2014; Grisaffe & Nguyen, 2011; Japutra, Ekinci, & Simkin, 2012; Japutra, Yuskel, Simkin, & Nguyen, 2012; Orth & Kiel, 2012). However, there is still a lack in marketing studies using attachment theory to investigate tattoo as a figure of security and its relations with nostalgia to improve consumer well-being. Consumer well-being is a person's cognitive and affective evaluation of his or her life (Diener, 2000). Thus, the main purpose of this study is shed light on the relationship between these constructs; and contributing to a difference facet of consumer behavior.

#### 2. Literature Review

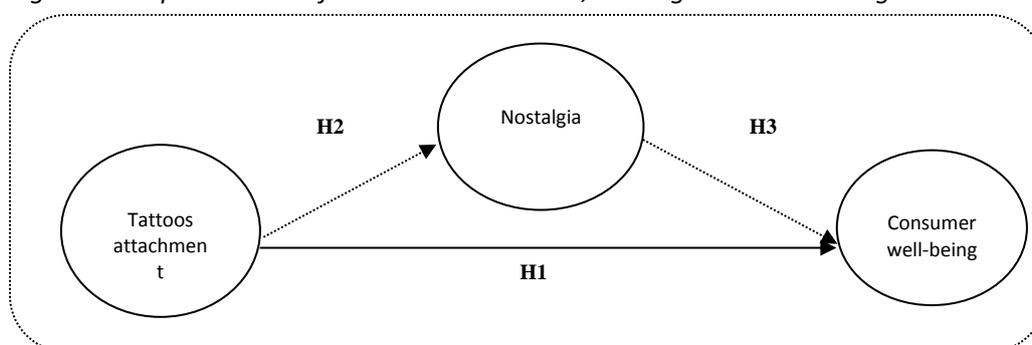
##### **Tattoo attachment, nostalgia and subject consumer well-being**

In the past times to have tattooed bodies was considered a deviant signal. On the other hand, in 21<sup>th</sup> century tattoos have gain popularity and seen as a type of consumption (Bengtsson, 2005; Velliquette, Murray & Creyer, 1998; Watson, 1998). Probably, for both, low and middle class, tattoo has the origin in psychology reasons, like necessity to have security and feel good.

This is the cornerstone of attachment theory that postulated the importance of connection figure due to the psychological structure developed since the infancy and continuing during all long life. Tattoo is a vehicle of meanings between entities and person's image (Karacaoglan, 2012). So, tattoo has the power to maintain memories alive about the past and still improve the consumer well-being. Here, we proposed the first hypothesis – h1 – there is a positive relationship between tattoo attachment and consumer well-being.

About nostalgia is a set of feelings produced by reflection on things, experiences or ideas linked to the past (Holak & Havlena, 1998). The actual experienced object, or perhaps even its substitute, has the power to re-evoked these emotions (Baker, Karrer & Veeck 2005). Considering tattoo as a vehicle of meanings (Karacaoglan, 2012) and the power to re-evoked emotions (Baker, Karrer & Veeck 2005), we proposed h2- wherein, there is a positive relationship between tattoo attachment and nostalgia and h3 –there is a positive relationship between tattoo attachment and consumer well-being. Hypotheses are presented in conceptual framework - Figure 1.

Figure 1: Proposed model for tattoo attachment, nostalgia and well-being



### 3. Methodological Procedures

First, a survey was performed with 138 tattoo's consumers. In the sequence we applied descriptive statistics and regression analysis using Plugin Process SPSS program. Three scales were used to assess the dimensions of latent variables. (i) Tattoo attachment: 3 items (cronbach's alpha  $\alpha=0,77$ ) adopted by Colins & Read (1990), (ii) nostalgia: 4 items (cronbach's alpha  $\alpha=0,79$ ) adopted by Chun (2016) and Haddad (2015) and (iii) consumer well-being: 6 items (cronbach's alpha)  $\alpha=0,76$  adopted by (Hervás & Vázquez, 2013). The respondents scored their opinion based on a seven point scale – completely disagree vs. completely agree. Table 1 shows the affirmatives.

Table 1: Scales used

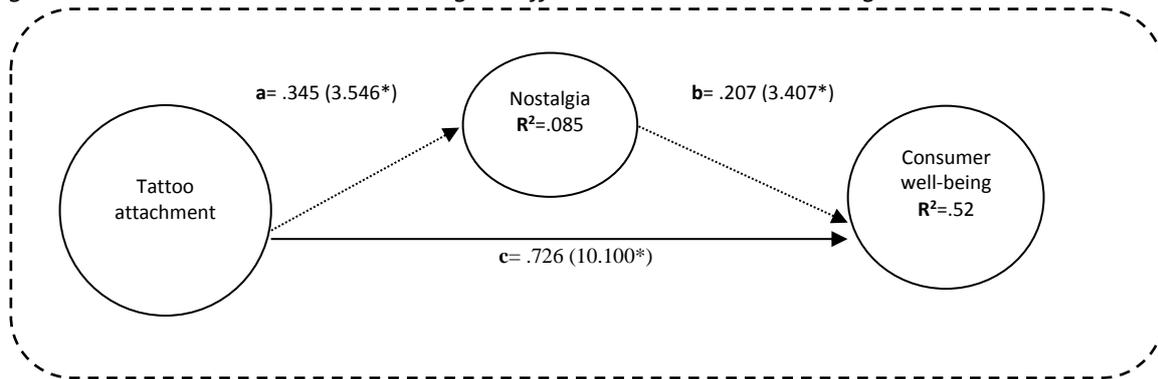
Sources	Affirmatives
Tattoo attachment Colins & Read (1990)	I am attached to my tattoos.
	I am attracted by my tattoos.
	My tattoos make part of my life.
Nostalgia Chun (2016) Haddad (2015)	My tattoos remind me good days.
	My tattoos evoke fond memories.
	My tattoos make me have nostalgic feelings.
	My tattoos it make me recall someone who was related to it.
Consumer well-being Hervás & Vázquez (2013)	My tattoos arouse me positive feelings.
	My tattoos make me safer.
	My tattoos improve my self esteem.
	My tattoos make me happier.
	My tattoos make me well emotionally.
	My tattoos arouse me positive thoughts.

#### 4. Results

We conducted a survey with 138 tattoo consumers; 62 male (76 female); average age 28 years old; average income \$437,00. The total of tattoo consumers is above of recommended by Hair et al., (1995) to regression analysis technique.

For the mediation analysis of nostalgia between tattoo attachment and consumer well-being we used the average aggregate variables. Subsequently, the analysis was done using SPSS Process - Model 4 (Hayes, 2013). Figure 2.

Figure 2: tattoo attachment and nostalgia's effect on consumer well-being



(a; b; c) unstandardized coefficients  
t values (\*)=p<.01

Results show positive effect of tattoo attachment on nostalgia  $F(1,138)=12,572$ ,  $p<.01$ ,  $R^2=.08$ ;  $b = .345$ ,  $t(138)=3,546$ ;  $p<.01$ . The effects of nostalgia on consumer well-being  $F(2,135) = 72,955$ ,  $p<.001$ ,  $R^2=.52$ ;  $b=.207$ ,  $t(135) = 3,407$ ;  $p<.001$ ) and tattoo attachment on consumer well-being  $b = .726$ ,  $t(135) = 10,100$ ;  $p<.001$ );  $Z=2,41$ ,  $\kappa^2 = .08$ .

#### 5. Discussion

The main purpose of this paper was to identify the relationship between tattoo attachment and consumer well-being mediated by nostalgia. Based on attachment theory, our argument is that, in an adult stage, consumers tend to have tattooed bodies as an unconscious phenomenon that express needs for security. According to attachment theory during infancy stage we tend to attach to our father or mother to face our fears (Bowlby, 1969). So, during adult stage, as an unconscious process we use consumption to have access of these figures, through luxury brands and tattoos.

Belaid & Behi (2011) and Chavanat & Martinet (2009) argue that consumer attaches to brands as a form to get status and feeling security. Some insights of this study, point out there is evidence, at least in literature that, like brands, tattoo improves consumers well-being and nostalgia is a powerful drive to reinforce this type of consumption.

#### 6. Theoretical, Managerial Contributions and Limitations

This study sheds light on different type of consumption that is neglected in quantitative researches and others types of positivist research paradigm. The main theoretical contribution of this study is to identify the relationship between tattoo as a figure of attachment and its influence on consumer well-being mediated by nostalgia. In market contexts, managers can arouse the nostalgia of consumers in favor of their brands, to improve consumer's well-being.

The first limitation of this study is not to consider the type of tattoo. Others studies can investigate if, the tattoo size has different levels of impact on emotional consumer well-being. Qualitative researches can bring out others reasons for tattoo consumption that were not considered here.

### Keywords

Tattoo, consumption, nostalgia, consumer well-being

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## **Fighting the Shrinkage: How Traditional Banks Can Utilize Start-Up Strategies for Business Model Innovation**

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### **Abstract**

Financial service providers are facing increasing pressure due to harsh regulation, low interest margins, new technologies, aggressive incumbents, and changing customer preferences. Many of them not only have to overhaul their processes and information systems, but also their complete business model. But how can a bank get to a new business model? What should the process of business model development look like? Usually, there is no such definitive process. However, an interesting starting point might be to utilize the concepts that are used by start-up companies. In particular, design thinking and lean start-up appear to be promising ideas. In this contribution, we analyze whether and how these concepts can be used to develop a process for traditional banks to renew their business models. The strategies used by start-up companies follow the approach of a consequent customer focus, so the process we develop shows the same characteristics. It offers a great opportunity for established banks to fight back and remain competitive.

### **Keywords**

Business model, banks, design thinking, lean start-up, start-up strategies

## Leading Across Cultures with Cultural and Emotional Intelligence

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### **Abstract**

Global leaders must face the challenges of cultural differences in the multiculturally interdependent world of the twenty-first century. Nobody ever leads across cultures perfectly, but culturally and emotionally intelligent leaders are likely to succeed in governing a variegated workforce across international borderlines. Each cross-cultural encounter is unique and will be shaped by the context in which it occurs, the expectations of the communicators involved, and their perceptions of what is at stake in the encounter. Globalization has placed an acute spotlight on whether cultures are able to develop leaders who are culturally and emotionally intelligent and globally engaged. There has also been a growing sense of urgency to understand why some leaders compete effectively when operating in a global context, and why some of them deal more effectively than others with cultural diversity. Incorporating cultural and emotional intelligence into leadership has been observed as immensely beneficial. Effective leadership relies on three forms of intelligence: rational, logic-based intelligence, cultural intelligence, and emotional intelligence. This paper attempts to propose a way of conceptualizing the role of cultural and emotional intelligence in influencing or enhancing leadership opportunities in international business relations.

### **Keywords**

Cultural intelligence, emotional intelligence, skills, awareness, global context, leadership

## 1. Introduction: Mindful Awareness and Leadership Behavior across Cultures

A mindful approach to effective cross-cultural communication as a leadership tool means that leaders will approach information about other cultures with an open mind and that they will break free of stereotypical categorizations of members of cultures that are different from their own. Mindfulness encourages leaders to tune in conscientiously to their habituated mental scripts and preconceived expectations. It also means the readiness to shift one's frame of reference, the motivation to use new categories to understand cultural differences, and the preparedness to experiment with creative avenues of decision making and problem solving. Mindful awareness allows leaders to understand diverse value systems that influence others' self-conceptions. Mindful leaders are open to a new way of identity construction. They are prepared to perceive and understand behavior from the others' cultural and personal standpoints.

The growing diversity of workplace demographics has urged leaders to acquire a high degree of cultural awareness and cross-cultural competences. This includes the ability to work and interact with people from different cultural backgrounds. Such interaction can be extremely difficult for leaders, because cultural barriers often cause misunderstandings and conflict that detract from efficient and effective interactions. With many more companies engaging in globalization, each bringing different patterns of thinking and negotiation styles, leaders must have a finely tuned awareness of global perspectives, the capacity for recognizing cultural synergies, and the ability to engage in continuous development. It has become clear that many leaders lack the essential skills and thus encounter confusion, frustration, and costly failures. Leadership today is a multicultural challenge. Leaders compete in a global marketplace, manage a diverse workforce, and try to keep up with rapidly shifting trends.

Culture has often been used to explain leadership behavior. In terms of leadership, the emic approach assumes that different leadership characteristics would be expected to occur in societies that have different cultural profiles (Howell, 2012). In contrast, the etic approach suggests that, although differences between cultures might exist, there are certain underlying behaviors that leaders have to perform to be effective, regardless of cultures. There are several ways to identify how culture influences leadership. Culture influences the personality traits and work values of leaders in a country. Personality appears as the outcome of a lifelong process of interaction between individuals and their environment, resulting in systematic differences in the person-typical behavior of individuals who grow up in different cultures. To a significant extent, culture determines the actual pattern of leadership behaviors in a country. Cultural values and norms influence the attitudes and behaviors of leaders in ways unconscious to them. In addition, cultural values reflect societal norms in the relationships between individuals. These norms specify acceptable forms of leadership behaviors.

The essentialist approach views leadership as a set of traits, behaviors, skills, or characteristics that cuts across situations, cultures, philosophies, and moral systems, whereas the contextualistic approach defines leadership as a complex system that is highly influenced by social, cultural, psychological, circumstantial, and historical factors. Leadership in eastern cultures is perceived as collective, holistic, spirituality-based, and in western cultures as hierarchical, authority-based, and individualistic. Along with the differing mental models, cross-cultural studies have also examined how the context affects leadership. Comparably, leadership is unique within each context and is dynamic, emergent, and evolving over time. Since leadership is a process, it is volatile and sensitive to changes. Leadership is perceived as an interactive situation in which knowledge, action preferences, and behaviors evolve, thereby provoking individuals to adapt. Universal and culture-specific leadership behaviors are not mutually exclusive categories, but could rather coexist in a single culture simultaneously. Culturally skilled leaders are able to move from being culturally unaware to being aware and sensitive to their own cultural heritage and to valuing and respecting differences. These leaders are aware of how their own cultural backgrounds, experiences, and attitudes, values, and biases influence interactions with others. Such leaders are able to recognize the limits of their competencies and expertise.

## 2. The Cultural Intelligence Model for Leaders

The cultural intelligence model provides one of the most promising cross-cultural competence models for leaders. It predicts a range of psychological (e.g., cross-cultural adjustment), behavioral (e.g., idea sharing and the development of social networks with culturally diverse others), and performance (e.g., task performance and cross-border leadership effectiveness) outcomes. Cultural intelligence is regarded as a complex, multifactor attribute that is composed of metacognitive, cognitive, motivational, and behavioral factors. It anticipates cultural adaptation, i.e. sociocultural and psychological alteration. Sociocultural alteration refers to the extent of socializing with employees from diverse cultures. Whereas psychological alteration refers to an employee's mental well-being when immersed in a different culture.

Cultural intelligence exists on a continuum that develops over time. This developmental process requires an underlying level of knowledge, the acquisition of new knowledge and alternative perspectives through mindfulness, and the accommodation and assimilation of this knowledge into behavioral ability. The acquisition of cultural intelligence includes comprehension from social interactions. Such social learning is a very efficacious tool for altering the experience of leaders into knowledge and skills. Social learning includes attention to the situation, continued possession of the knowledge gained from the situation, reproduction of the behavioral skills monitored, and eventually receiving feedback or reinforcement about the effectiveness of the adjusted behavior.

Cultural intelligence is a strong predictor of a leader's overall performance and adjustment in multicultural situations. Based on Soon Ang and others (2007) research nearly 90 percent of leaders from sixty-eight countries labelled cross-cultural leadership competence as the top challenge for the twenty-first century. Most contemporary leaders encounter dozens of different cultures on a daily basis. It is impossible to master all the norms and values of each culture, but effective leadership requires some adaptation approach and strategy. The most pressing reasons leaders need cultural intelligence is to understand a diversifying customer base, to manage diverse and cross-border teams, to recruit and develop cross-cultural talent, to adapt their leadership style, and to demonstrate genuine respect for all kinds of people. A leader's ability to adapt successfully to unaccustomed cultural contexts depends on the four dimensions of cultural intelligence. Metacognition, cognition, and motivation are perceived as mental capabilities and involve mental reasoning, whereas observable activities are described as behavioral capabilities of individuals.

Metacognitive cultural intelligence refers to a leader's level of conscious awareness during cross-cultural interactions. Leaders with heightened metacognitive capabilities consciously examine their own cultural statements, meditate during interactions, and adjust their cultural knowledge when dealing with culturally diverse employees. Metacognitive cultural intelligence supports active reasoning about people and situations in different cultural settings; it precipitates active challenges to rigorous dependence on culturally-bound thinking and judgments; it urges leaders to adapt and modify their strategies so that they are more culturally efficient and more likely to achieve coveted outcomes in cross-cultural encounters. High metacognitive cultural intelligence is a transparent token of conscious awareness of the cultural preferences and norms of different cultures prior to and during interactions. Business leaders high in metacognitive cultural intelligence monitor cultural assumptions and adjust their mental models during and after pertinent experiences.

Cognitive cultural intelligence refers to a leader's level of knowledge of the cultural environment. This dimension indicates knowledge of cultural universals as well as knowledge of cultural differences. It is regarded as being a critical component, since knowledge of culture influences leaders' thoughts and behaviors. Understanding the components of culture allows leaders to better appreciate the systems

that create specific patterns of social interaction within a culture. Leaders with high cognitive cultural intelligence are better able to interact with people from a different culture.

Motivational cultural intelligence reflects the capability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences. The motivational dimension of cultural intelligence triggers effort and energy directed toward success in unusual cultural environment. There are three sub-dimensions to motivational cultural intelligence: intrinsic motivation, extrinsic motivation, and self-efficacy. Intrinsic motivation refers to the degree to which individuals derive enjoyment from culturally diverse situations; extrinsic motivation refers to tangible benefits individuals gain from culturally diverse experiences; self-efficacy refers to the confidence that individuals will be effective in an intercultural encounter. These motivational dynamics play a significant role in how leaders approach cross-cultural situations. The motivational aspect of cultural intelligence goes beyond the excitement of travelling to a new place. It is the perseverance required when the novelty wears off and the difference starts to occur.

Behavioral cultural intelligence reflects the capability to demonstrate suitable verbal and non-verbal actions when interacting with individuals from different cultures. It refers to the extent to which a leader acts effectively, both verbally and non-verbally, in cross-cultural encounters. The behavioral dimension of cultural intelligence is a vital component because verbal and non-verbal behaviors are the most prominent features of social interactions. Leaders with high behavioral cultural intelligence are flexible and can adjust their behaviors to the specifics of each cultural interaction. This dimension of cultural intelligence is primarily the outcome of motivation, knowledge, and awareness. Leaders can enhance this capability by adapting their communication, learning to negotiate differently, and knowing when to flex and when not to.

A heightened level of awareness, checking, and planning is necessary to effectively communicate the relevant ideas. The appropriate adaptation of behavior to diverse cultural settings involves learning what topics of discussion are acceptable in various settings. The topics individuals talk about are ingrained in cultural values and assumptions that can only be comprehended with profound cultural planning. Adequate insight into the application of words begins with considering appropriate topics for negotiation. Even when adequate words are chosen, a great deal of miscommunication can occur in how information is delivered. Although words and delivery are important part of the symbolic exchange process, culture affects nonverbal behavior, including distance, touching, body position, gestures, facial expressions, and eye contact. The biggest cultural differences exist mainly in relation to territorial space, eye contact, touch frequency, and insult gestures. Despite the fact that non-verbal behaviors are often unconscious, when individuals obtain incompatible verbal and non-verbal messages in a cross-cultural encounter, it is the non-verbal aspect that they believe to be more convincing. Non-verbal symbols are used for negotiating interpersonal attitudes; they are an apparent reflection of an individual's emotional condition. Perceptive leaders have the ability to read the body language of culturally diverse others and to compare these cues with verbal signals. Being perceptive refers to the ability to notice the discrepancies between verbal and non-verbal symbols.

A culturally intelligent leader has a macro understanding of cultural similarities and differences which leads to effective behavioral patterns in cross-cultural contexts. A macro understanding of culture is the degree to which individuals understand how culture influences how people think and behave. It is also a level of familiarity with how cultures are similar and different. To truly understand culture's role in shaping behavior, leaders must understand that culture is not just the side-lined storehouse of ideas and customs individuals live with, but that it is shaped by various factors. In order to behave adequately an individual needs to understand the cultural norms and values associated with diverse cultures, the ways that communication styles, predominant religious beliefs can differ across cultures. They need general knowledge about different types of economic, business, legal, and political systems that exist throughout the world. Different cultural contexts introduce different challenges that individuals must

deal with in order to behave adequately. Fortunately, individuals are inherently social human beings and act by taking advantage of the power of their group membership. Groups create solutions to the challenges posed by their environments in order to address social motives; these solutions demonstrate the basis of culture.

Culture influences socially transmitted behaviors, in the form of cultural practices and worldviews. Cultural practices refer to the behavioral responses that groups produce in order to live culturally. Cultural worldviews refer to ideological beliefs that people sustain about any specific domain. Cultural practices are flexible and adapted for each individual. Cultural worldviews, however, tend to be rather stereotypic. The way individuals think, feel, and act can be defined as role performances, since mental processes and behaviors occur in a particular situational context with a personal and evolutionary history, accumulated experiences, and possible future consequences. Mental processes and behaviors that appear under such conditions are pertained to as an individual performance. This suggests that the relative contributions of basic human nature, culture, and personality are moderated by the situational context in which the individual occurs. Some situations are likely to evoke similar responses from all individuals regardless of personality or culture. Actual behaviors are more influenced by basic human nature through universal psychological processes, and personality through individual differences in role identities, while self-reports of attitudes and values are more influenced by culture through social roles.

Human behavior is cultural, because human beings seem to be particularly geared toward understanding the intentions and meanings held by other individuals in their social environment. The intimate and long-standing interpersonal relations of individuals support the development of shared meanings, and the development of institutions and artefacts. Thus, it can be expected that the social culture that individuals live in, has a profound effect on the types of behaviors that can be examined in cross-cultural encounters. Social behavioral patterns are naturally linked to the sociocultural context in which they occur. Therefore, for example greeting procedures differ widely from culture to culture. These are downright examples of cultural transmission on the social behavior of individuals.

Cultural intelligence is an important skill set for leaders to lead. If leaders do not become culturally intelligent, they will be managed by the cultures where they work rather than leading by their guiding values and objectives. Leading an organization toward becoming more culturally intelligent starts with wedding cultural intelligence with its overall mission. Such integration means redefining what success represents for the organization. It includes measurements for social responsibility and respect alongside financial targets. The strategic steps should be permeated with action steps that help leaders develop culturally intelligent behavioral patterns.

### **3. Emotional Intelligence for Modern Leadership**

All over the world, leaders and companies are adjusting to the dramatic political, economic and social changes for the past decades. There has been enormous growth in the business-advice industry that result in changing the rules for work. Gurus, authors, academics and consultants are all adding to a flood of information. Some of it is valuable; much is not. What makes the difference between those who become gurus and stars is not so much their brain power – but their emotional competence. It is their abilities to listen, to influence, to collaborate, to get people motivated and working together well. It is also the principle to remain calm in all circumstances and be able to face all kinds of provocations that is closely connected to the position of contemporary leaders. They should also exhibit high self-control, conscientiousness, and empathy. Leadership has gone from being a totally unexplored field of study (some fifty years ago) to one dominated by fads and gurus of the moment.

How can leaders sort out through all this information? How can they decide what is a fad and what is an idea of lasting value? Indeed, to what extent is it necessary to be informed about the latest thinking

at all? And what are the essential truths of leadership? These are but a few questions the paper tends to focus on.

Leadership needs intellectuals with deep understanding not only of business, but also history, society and culture as their major decisions must be based on a solid understanding of history, culture, society, psychology, etc. Leaders today are stressed and troubled and want to find cheap, quick and effective solutions to difficult problems. They are always trying to catch up, meet deadlines, although most are not that important – they are just routine.

A modern leader is a social philosopher as well as psychologist who challenges future: it holds profound and unpredictable change. At work these days, the constant is change and the atmosphere in the globalized era of leadership has changed. People are encouraged to take risks but some of them seem at a loss as they lack adaptability. These people are ruled by fear, anxiety, and a deep personal discomfort with change. Too many changes may lead a company to fatal mis-decisions causing large financial failures including market downflow.

A paradox of work life is that different people consider the same situations they are to face in completely different ways. New challenges always result in increased level of stress. For many bad stress results in a very negative act, paralyzing and demotivating them. On the other side, good stress can trigger motivation, energy, enthusiasm and other positive emotions. With adequate emotional resources people are able to overcome their barriers and be more flexible in adapting to new challenges proving their qualities and new ideas, thus eliminating a devastating threat of bad stress to minimum.

Smart CEOs should be well aware that considering change is one of important prerequisites they need to know to prepare their companies for success. “Adaptability requires flexibility and it depends, in turn, on an emotional strength – the ability to stay comfortable with ambiguity and remain calm in the face of the unexpected. Another competence that supports adaptability is self-confidence” (Goleman, 1998).

#### **4. Emotional Intelligence and Emotional Competence Skills**

A vital component of an organization’s leadership philosophy also involves emotional intelligence skills – this change can be a crucial fact for companies’ competitiveness. Unlike IQ test that measures the capacities of the human mind, McClelland (1973) introduced a new method - testing competence rather than intelligence. The new rules do not focus so much on academic abilities – they accentuate instead personal qualities – initiative, empathy, emotional approach, optimism, adaptability, etc. These soft skills or competence challenge the highly prioritized idea claiming that what matters is intellect (measured through IQ tests). McClelland’s approach claimed that it was the emotional intelligence abilities that mattered more for superior performance.

Although classic leadership theories consider the relevance of people’s behavior and their relations to others, what is new in the area are empirical studies that specify how much emotional intelligence matters for success. Among them are skills in listening and understanding, flexibility and teamwork, but also the ability to energize others, commitment, and confidence in those they work with.

Goleman (1998) claims that “an emotional competence is a learned capability based on emotional intelligence that results in outstanding performance at work. At the heart of this competence are two abilities: empathy, which involves reading the feelings of others, and social skills, which allow handling those feelings artfully.”

The head and mind (the ratio and heart) are the two phenomena that sharply divide competencies. Analytic reasoning and technical expertise are cognitive skills while combination of thoughts and emotions are denoted to as emotional competencies. Emotional competence is especially crucial for leadership – their strengths and weaknesses can be measured in the gains and losses of the organization.

To be successful in our career, we have to learn the competences and to listen to our emotions to manage them well to succeed in the workplace. Our emotions are an integral part of our personal style. Fear, love, anger, happiness, sadness, surprise, shame and disgust are seen by many psychologists as the “primary emotions.” Our emotional make-up influences both our general temperament and our day-to-day moods. Our emotions have been genetically shaped over 50,000 human generations. As a result, our interactions with other people are colored not only by our rational judgment and our personal history, but also by our hidden genetic past. We know that rational intelligence means little when emotions take over. The jealous lover, the angry boss, the upset partner all find it difficult to listen to reason or to act rationally. Yet if we are not able to manage our emotions, they will take over completely. But what should we do to reach a level of emotional intelligence that allows us to operate successfully?

1. It is good to know our emotions – being able to monitor them so that we have a surer sense of what we really feel. This ability allows to make clearer decisions and deal with difficult situations. If we can recognize our feelings of irritation, we might be able to do something to make our mood more positive. Once we have recognized what is happening, it is easier to do something about it.

2. Manage our emotions – it means being able to express our feelings appropriately and to shake off negative ones more quickly. People who are depressed cannot easily shake off a mood even when they are aware that it is distressing. Anger, too can engulf our rational thought processes and cause us to do or say things we would never otherwise do or say. We should try to tackle them early - minor irritations can soon build up into angry outbursts. It is good to release physical tension in harmless way – e.g. beat up a cushion, scream aloud (to ourselves) or break a glass or plate. Such an action may release the physical tension and help act rationally.

Anxiety belongs to potentially dangerous emotions that is frequently triggered by stress. There are techniques that tend to reduce stress including regular exercise, healthy eating, meditation, and relaxation and breathing techniques.

3. Motivate ourselves – it is the ability to make our emotions work for us. This skill is essential if we want to be successful and creative in our work. It may be very useful with managing our workload and focusing attention. Hope and optimism are major factors in success – optimistic people see failure as something that can be changed. Pessimists, on the other side, will often blame the failure on a characteristic he or she feels helpless to change. Being optimistic or pessimistic may be inborn traits, but temperament can also be learned through experience.

4. Recognize emotions – if we are able to recognize emotions in other people, it is easier for us to show empathy and react to what others need or want. This skill is very powerful and very important in both our personal and professional lives. The two key skills we need are sensitive observation and attentive listening.

Non-verbal signs and body language can say a lot about someone’s mood and emotional state. Naturally, there are differences of interpretation between cultures, but generally we are quite intuitive in forming impressions about our partners – noticing facial expressions, head movements, hand and arm gestures, etc. We should be especially sensitive to signs of negative emotions – e.g. clenched fingers, pointing the index finger at the other person, standing when the other person is sitting, striding around the room, etc. Skills in listening and understanding, flexibility, and teamwork are frequently

more preferred in companies than technical know-how. Attentive listening allows us to interpret the speaker's tone of voice and helps us to read any meanings between the lines. If we listen attentively, this can help avoid jumping to conclusions that may well be wrong. An attentive listener remembers the saying, "God gave us two ears and only one mouth, so we can listen twice as much as we speak." Being emotionally intelligent allows us to be comfortable with ourselves and with others. It also allows us to manage our own emotions and deal with the emotions of those around us - it can help us motivate ourselves. The result is that we become more positive in our thoughts and more effective in our interpersonal interactions, both in our private lives and in the workplace.

Emotional intelligence is therefore a very valuable skill for our career. Unfortunately, it is also a skill that many people spend too little time thinking about and trying to improve. The emotional competences that most often lead to achieving top levels are:

- initiative, achievement drive, adaptability,
- influence, team leadership, political awareness,
- empathy, self-confidence, developing others.

Final conclusions resulting from closer focus on emotional intelligence as subject for training soft skills are special values added from emotional competence. At the same time the truth is that lack of this competence leads to high losses in company's both financial as well as marketing reputation worldwide. Global changes, financial crises as well as new migration waves – they all add to shifts in cultures. They go hand in hand with profound changes in organizations in different parts of our planet. Those ones that go through the greatest changes need leaders with excellent emotional intelligence the most. One of major mistakes is supposing that people with high IQ are supposed to be good leaders. Leaders who usually fail are almost exclusively those with high level of expertise. Their fatal weakness is in emotional incompetence – arrogance, overreliance on brainpower, inability to adapt to unexpected economic shifts and underestimating collaboration with colleagues and teamwork.

Closer focus on training soft skills including emotional and cultural intelligence should be an integral part of all leadership courses. Such trainings then result in preparing well-trained leaders who are able to challenge new issues the future makes them face.

## 5. Conclusion

A cross-cultural leader with a brilliant intellect remains emotionally distant from the dissimilar others and fails to understand the nuances of the interactions. Cross-culturally involved leaders need emotional intelligence to cope successfully and mindfully with cognitively understood interaction standards. There should be a dialectical process of reflection to arrive at an agreement and negotiate a shared meaning in which the participants are able to criticize existing principles and norms, to integrate the positive features of those principles and norms, and to invent completely unique principles and norms to adequately deal with unusual situations. Cultural and emotional intelligence have been regarded as prerequisites of cross-cultural competence enhancement through changes in ethnocentrism, cross-cultural communication apprehension and international awareness.

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## The Role of SMMEs in a Developing Country's Economy: Is the Shrinkage Due To Poor Internal Control Systems?

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### Abstract

Small, Medium and Micro Enterprises (SMMEs) worldwide are believed to contribute up to 33% of countries' national Gross Domestic Product (GDP); provide at least 45% of all employment opportunities (ACCA, 2013; World Bank, 2015). Similarly, in South Africa, SMMEs stimulate the national economy by providing employment opportunities to at least 60% of the national workforce (Fatoki & Odeyemi, 2010; Swart, 2011) while contributing up to 57% to the national GDP (Naidoo & Urban, 2010; Thabehe, 2013). Unfortunately, these business entities are reported to have one of the worst sustainability rates in the world (Kabiawu, 2013; Wiese, 2014), especially when compared to SMMEs operating in other countries<sup>1</sup>, as around 75% of South African SMMEs fail after being in operation for only three years (Cant & Wiid, 2013; Moloi, 2013).

From the above, clear tangent planes emerge that although South African SMMEs play an imperative role in adding socio-economic value to the national economy their weak sustainability is believed to have an adverse influence on the overall stimulation of the national economy, contributing to the overall shrinkage of the South African economy. This view is partially supported by two key economic indicators of the South African economy (IndexMundi, 2014; Statistics South Africa, 2014a; Statistics South Africa, 2014b; Trading Economics, 2014), namely 1) there was an estimated 13.19% decrease in the South African GDP from 2012 ( $\pm$ US\$ 403.89 billion) to 2014 ( $\pm$ US\$ 350.63 billion), and 2) there was an estimated 9.55% increase in the number of unemployed South African citizens from 2012 ( $\pm$ 12.57 million) to 2014 (13.77 million). In the same vein, some countries around the world (e.g. Australia, Canada, India and Vietnam) experienced an increase in their national GDP while other countries around the world (e.g. Germany and Brazil) experienced a decrease in the number of unemployed citizens (Bruwer, 2016).

The economic environment of any country, including the sustainability of SMMEs, is directly impacted by an array of economic factors (Wessels, 2000; Mohr & Fourie, 2004; Lazeretti & Petrillo, 2006).

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<sup>1</sup> Research shows that, among other statistics, 48% of Canadian SMMEs fail after being in operations for five years, 43% of Brazilian SMMEs fail after being in operation for three years, and 23% of Australian SMMEs fail after being in operation for five years (Ahmad & Seet, 2009; Oduyoye et al., 2013; Rao & Omnamasivayya, 2013).

According to Herrington and Kew (2013), the South African economic landscape is deemed as “harsh” and is influenced by economic factors which include, *inter alia* (Kunene, 2008; Swart, 2011; SAICA, 2015), extensive red tape, high interest rates, high inflation rates, high levels of crime, volatile market conditions, weak public service delivery, shortage of skills, limited access to finance.

Taking into account the above, it becomes apparent that economic factors will also have a direct impact<sup>2</sup> on a business’ ability to achieve sound levels of economic performance, ultimately impacting on a business’ ability to remain in operation for the foreseeable future (Jeon et al., 2010; Lebacqz et al., 2013), which is why it is imperative that economic factors should be properly managed. One manner in which economic factors can be managed is through the implementation of a sound system of internal control (Rae & Subramaniam, 2008), which should comprise a structured process that is made up of inter-related elements to assist in the mitigation of risks while simultaneously providing reasonable assurance surrounding the attainment of relevant objectives in the foreseeable future (Spira & Page, 2003; Agbejule & Jokipii, 2009). Previous research studies (Siwangaza, 2013; Bruwer & Coetzee, 2016) do however show that South African SMMEs make use of customized internal control systems that are not adequate or effective as they only mitigate a few risks to a reasonable extent.

A sound system of internal control is built on the control environment as foundation and influenced by implemented internal control activities (D’Aquila, 1998; COSO 2013). The control environment is a collection of expected norms, qualities and actions that are both endorsed and practiced by management which, in turn, provides the atmosphere in which relevant stakeholders execute their relevant responsibilities in order to help attain relevant business objectives in the foreseeable future (COSO, 2013; Dmitrieva, 2014; Vollbehr, 2014). In turn, internal control activities is a collection of actions that are based on policies and procedures which assists with the mitigation of risks and the attainment of business objectives through the deployment of preventive and detective controls which pertain to the segregation of duties, proper authorization activities, adequate document usage and design, safeguarding of assets and independent checks (Frazer, 2012; COSO, 2013). When taking into account the size of the average South African SMME, the control environment of these business entities are best represented by the managerial philosophies and managerial conduct of its management (Adeniyi & Aramide, 2014) – hereafter referred to as the managerial conduct.

The objective of this study is to determine whether there is an empirical relationship between the implemented internal control activities as well as the managerial conduct of SMMEs, and the economic sustainability of these business entities in a developing country, namely South Africa. The elements of the Committee of Organising Committees (COSO) model on internal control (COSO 2013) was used as basis for developing independent variables; consisting of 41 items on internal control activities and 53 items on managerial conduct. Information measuring both financial and reputation sustainability was used to measure the economic sustainability (7 dependent variables). Principal component analysis was conducted to reduce the number of items and multiple regression analysis models were developed to test the directional relationship between the drivers and the measures. Data were obtained from 120 managers and 80 staff members of SMMEs based in the Cape Metropole by means of structured interviews. The number of respondents is limited due to data being gathered by a consulting agency; with the main intent to enhance the quality and objectivity of information provided by respondents.

Various parties will benefit from the study: 1) SMME management will obtain valuable insight into how internal control activities and managerial conduct influence the economic sustainability of business entities and how to improve these and 2) governments, decision making bodies and funding bodies (e.g. banks) will be able to measure individual SMMEs against identified drivers to ascertain their potential rate of success; identify key assistance required by these business entities to enhance their

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<sup>2</sup> Economic factors are risks – inevitable events which may or may not occur that will impact upon the objectives of a business entity, be it positive or negative (IIA, 2003; Smit, 2012).

economic sustainability. Although only a limited number of SMMEs were included in the study, SMMEs' management's response bias was eliminated by incorporating perceptions from both SMME management and SMME staff. Future research can be conducted to include a wider population.

**Keywords**

SMMEs, managerial conduct, internal control activities, economic sustainability, developing country

## Country Personality Scale: Is a Five-dimensional Model a Better Methodological Instrument?

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### Abstract

Researchers investigate the country personality scale and explore the use of a five-dimensional scale instead of the originally proposed six-dimensional scale and its application for evaluating consumers' behavioral intentions. The aim of this paper is to evaluate the country personality scale and to adapt it to the Portuguese context, proposing a model anchored in a reduced country personality scale. Pretest (sample of 115 Brazilians) and main survey data (685 responses from São Paulo and Bahia states in Brazil) are considered. Portugal is the stimulus country. The proposed research model relating the country's personality dimensions to its behavioral intentions to visit is estimated using structural equation modeling with AMOS, and the research hypotheses are tested. The results suggest that five dimensions (agreeableness, assiduousness, conformity, snobbism, and unobtrusiveness) should be considered when measuring country personality. There is a perception that this scale is an instrument useful for a quantitative approach to measuring a country personality construct and its impact on behavioral intentions, which can help researchers and marketers address international and cross-cultural marketing issues. Based on the main survey data, subjected to the personality trait frequency analysis, Portugal is classified as a conformist country.

### Keywords

Country personality, behavioral intentions, Portugal, Brazil

## The Importance of Intellectual Capital in Hospitality Industry

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### **Abstract**

Technological changes lead to change the organizational structure of firms. The changes into organizational technology, internet and new managerial approaches tend to increase existing intellectual capital of firms. Moreover, intellectual capital tends to increase organizational performance of firms. However, it is difficult for firms to register intellectual capital as a value of firm. Hospitality industry such as travel agents and F&B firms has more intellectual capital than other industries because hospitality industry depends on human being and relationships. Nevertheless, research on intellectual capital and organizational performance in hospitality industry is a limited extent. Thus, the main purpose of paper is to reveal the importance of intellectual capital in hospitality industry. For this purpose questionnaire was employed to travel agents and F&B firms. It can be concluded that there is moderate correlation between organizational performance of travel agents and intellectual capital, and organizational performance of F&B firms and their intellectual capital.

### **Keywords**

Intellectual capital, intangible assets, organizational performance, travel agents, F&B firms, Antalya

## 1. Introduction

Technological advancements enhance the capability of firms to reach knowledge at worldwide level. This obtained knowledge lead to increase performance of firms, therefore, competition between firms. The firms seek the way to increase their shared value in market and their carrying value. Thus, firms search ways to register their valuable intellectual capitals as their real value.

Intellectual capital can be conceptualized as the difference between the carrying value and the market value of firm (Edvinsson & Malone, 1997). Intellectual capital also refers to intangible assets such as data, information, intellectual property and capabilities that are used to create welfare (Kannan & Aulbur, 2004) whereas the intellectual capital has been conceptualized as tangible assets that are obtained, formalized and leveraged to generate welfare by producing higher-value assets (Stewart, 1999). However, when financial-based assets such as land, building, plants and physical assets are compared with intangible assets such as skill, customer relations, expertise, talent, reputation, corporate culture, organizational practices, someone can say the intangible assets are not explicitly visible in the financial statements of firms (Sveiby, 1997). This intangible assets and their operation is the essence of intellectual capital (Bontis, 1996).

The traditional financial reporting systems cannot be useful to calculate and register the true value of a firm because financial reporting systems just measure the short term financial and tangible assets (Yang, Lin & Yeh, 2009). On the other continuum firms seek to calculate their intellectual capital value to report their stakeholders; thus firms are in search of ways to calculate intangible assets in recent years.

The increase of the difference between market value and book value of the firms has led to an increase in the number of the studies aiming to find missing values in the financial statements. Therefore, issue of intellectual capital has been the subject of various researches because the closure the difference between the book value and the market value of firm characteristic of intellectual capital (Fathi, Farahmand & Khorasani, 2013).

The travel agents and F&B firms operating under hospitality industry are one of the sectors that have different and various intangible assets such as knowledge, human power, corporate culture and reputation. However, the number of the studies aiming to reveal the importance of intellectual capital in hospitality firms and to reveal the importance of intellectual capital on organizational performance of hospitality industry is a limited extent. Therefore, the main objective of the research is to reveal the importance of intellectual capital in travel agents and F&B firms and to reveal the importance of intellectual capital on organizational performance of travel agents and F&B firms, and giving recommendations according to results. In addition, it has been also aimed to measure the ratio of inexperienced staff and the ratio of staff who know at least two foreign languages in order to gain knowledge about human capital of travel agents and F&B firms operating in Antalya.

## 2. Intellectual Capital

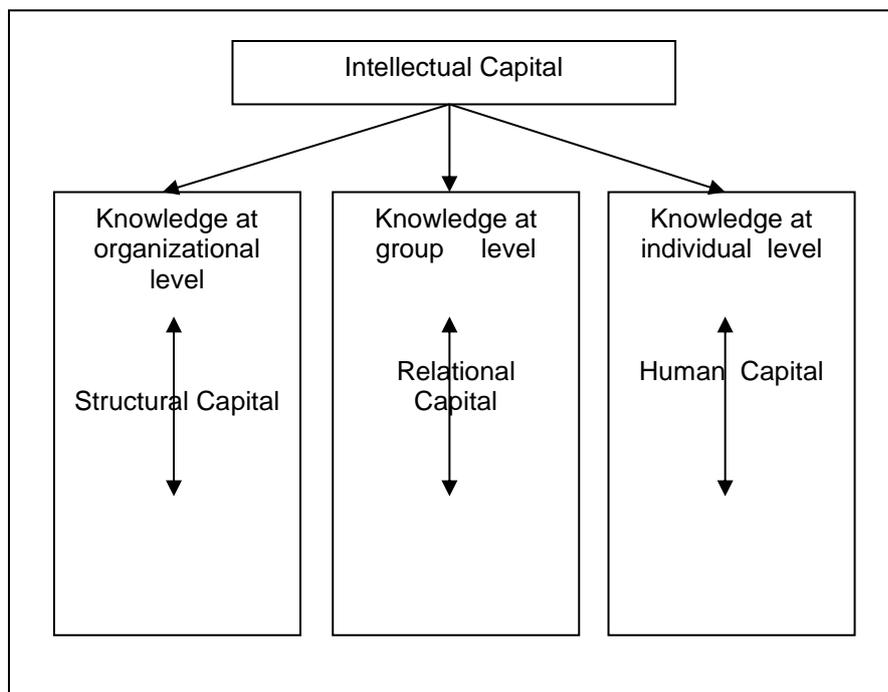
Intellectual capital consist intangible assets. In recent years firms have debt to obtain and maintain their intellectual capital such as knowledge, best practices, licensing, property rights, brands and design. Intangible assets covers copyrights, computer software, movies, patents, offering rights, import quotas, customer lists, franchises, marketing rights and market share, supplier and consumer relationships, and consumer loyalty (Turkish Accounting Standart-38). For that reason the key resource of competitive advantage and organizational performance is considered intellectual capital.

According to Edvinson and Malone (1997) information, organizational technology, professional skills, experiences and customer loyalty of a firm can conceptualize as intellectual capital of this firm. Kannan

& Albur (2004) also include data and intellectual property in intellectual capital because data and intellectual property can be used to create prosperity. According to Brannström and Giuliani (2009) intellectual capital is the sum of intangible assets and purchased goodwill.

There is not widely accepted categorization of intellectual capital. The researches have included different elements within the scope of intellectual capital. According to Osterland (2001) intellectual, consumer, human and supplier capital are the elements of intellectual capital. Sullivan (2000) has divided human capital as skill of the staff, technical knowledge and experience. Lim and Dallimore (2004) has divided intellectual capital as business capital, human capital, functional capital and institutional capital. The researches (Abeysekera, 2003; Curado & Bontis, 2007; Sallebrant et al., 2007) have subdivided intellectual capital into three categories: structural capital, relational capital and human capital. Figure 1 summarizes the categorization of intellectual capital.

Figure 1: The Categorization of Intellectual Capital



Source: Ordonez de Pablos, 2004, p. 636

According to Bontis (1998) structural capital includes concrete structures. The culture has been also considered as a valuable and extensive element of structural capital by Stewart (1999). The structural capital includes patents, design rights, copyrights, trade secrets, service marks, trademarks, corporate culture, management philosophy, management processes, financial relations, and information systems (CIMA, 2005). All firms that have shareholders and stakeholders have relational capital (Stewart, 1999). According to Rudez and Michalic (2007) image, customer satisfaction, distribution channel and brands are relational capital of firms. The relational capital also consist customers, customer loyalty, backlog orders, company names, licensing agreements, business collaborations, franchising agreements, and favorable contracts (CIMA, 2005). The last category of intellectual capital is human capital and it represents the intangible assets created by individuals. Individuals create capital by their behaviors, intellectual abilities, and competence (Roos et al., 1997). According to CIMA (2005) know-how, vocational qualification, education, work-related knowledge, psychometric assessment, occupational assessment, entrepreneurial innovativeness, and changeability is some examples of human capital.

### 3. Intellectual Capital and Organizational Performance

The intellectual capital is a new tool to measure the true value of firms because traditional accounting tools cannot sufficiently measure the true value of firms (Fathi et al., 2013). Gan and Saleh (2008) conducted research to reveal the relationship between organizational performance and intellectual capital. According to their results there is important effect of intellectual capital on productivity and profitability. Salman et al. (2012) have also argued that there is a relationship between organizational performance and intellectual capital. Setayesh and Kazemnejad (2010) done research about issue of intellectual capital in order to investigate whether there is effect of intellectual capital on the organizational performance of firms operating under the Tehran Stock Exchange or not. They found that there is a positive correlation between asset turnover rate and intellectual capital. Kurgun and Akdağ (2013) have argued that there is a positive relationship between organizational performance and structural capital in hotels.

### 4. Methodology

The questionnaire was developed towards F&B firms and travel agents that operating in the service sector by benefiting from the questionnaire employed in the study of Geri (2012) in order to present performance values of the F&B firms and travel agents and their position in the market and the questionnaire included in the study proposed by Sharabati and others (2010) to measure the intellectual capital and its sub-dimensions. The questionnaire consists of two parts. In the first part, six questions were asked to the participants to determine the characteristics of staff working in the F&B firms and travel agents included in the study. In the second part of the questionnaire, a total of 92 statements related to the sub-dimensions of intellectual capital like structural capital (30 statements), human capital (32 statements), and relational capital (30 statements) were given to the F&B firms and travel agents with 5-point Likert scale. In addition, a total of 14 statements related to organizational performance were given to the F&B firms and travel agents included in the study with 5-point Likert scale.

Croanbach's Alpha (CA) value was calculated in order to test the reliability of the scale used in the study for travel agents. The CA value of human capital was identified as 93 %, whereas the CA value of structural capital was identified as 94 %, the CA value of relational capital was identified as 93 % and the CA value of organizational capital was identified as 87 %, respectively. Croanbach's Alpha (CA) value was calculated in order to test the reliability of the scale used in the study for F&B firms. The CA value of human capital was identified as 93 %, whereas the CA value of structural capital was identified as 94 %, the CA value of relational capital was identified as 93 % and the CA value of organizational capital was identified as 90 %, respectively. Since the Croanbach's Alpha value is over 70%, it can be suggested that scale is reliable (Hair et al., 2009).

The target population of this study is F&B firms and travel agents serving in Antalya, where the study is conducted in. The data were obtained through a total of 82 questionnaires applied to the middle and senior managers of randomly selected F&B firms, and 90 questionnaires applied to the middle and senior managers of randomly selected travel agents.

The frequency analysis is performed for the ratio of R&D expenses in operating expenses, the ratio of training expenses in operating expenses, the ratio of the inexperienced staff, the ratio of the staff who know at least two foreign language, and ratio of R&D expenses in the operating expenses in order to reveal the staff characteristics of F&B firms and travel agents. Then, factor analyses were performed to gather dimensions of intellectual capital for each travel agents and F&B firms. Intellectual capital is dimensioned as human capital, structural capital and relational capital for both travel agents and F&B firms. The organizational performance scale is collected in one-dimension. Reliability analyses were performed for each of the dimensions obtained and Cronbach's Alpha values were determined

between 87% and 96%. Since the Cronbach's Alpha value is over 70%, it can be suggested that each dimension is reliable (Hair et al., 2009). Then, correlation analysis was performed.

## 5. Results and Discussion

The frequency analysis was performed to present the ratio of R&D expenses in operating expenses and the features related to the staff of the travel agents and F&B firms included in the research. Results of the ratio of R&D expenses in operating expenses are given in Table 1.

*Table 1: The Ratio of R&D Expenses in Operating Expenses*

	Travel Agents		F&B Firms	
	f	%	f	%
0 %	9	10.0	4	4.9
1-10 %	23	25.6	33	40.2
11-20%	23	25.6	26	31.7
21-30 %	25	27.7	7	8.5
30+ %	10	11.1	12	14.7
Total	90	100	82	100

Results of the ratio of training expenses in operating expenses are given in Table 2.

*Table 2: The Ratio of the Training Expenses in Operating Expenses*

	Travel Agents		F&B Firms	
	f	%	f	%
0 %	6	6.7	4	4.9
1-10 %	58	64.4	46	56.1
11-20 %	12	13.3	25	30.5
21-30 %	10	11.1	3	3.7
30+ %	4	4.5	4	4.8
Total	90	100	82	100

Results of the features related to the staff are given in Table 3 and 4.

*Table 3: The Ratio of the Inexperienced Staff*

	Travel Agents		F&B Firms	
	f	%	f	%
0 %	1	1.1	18	22.0
1-10 %	19	21.1	45	54.9
11-20 %	35	38.9	13	15.9
21-30 %	14	15.6	3	3.6
30+ %	21	23.3	3	3.6
Total	90	100	82	100

*Table 4: The Ratio of the Staff Who Know at Least Two Foreign Language*

	Travel Agents		F&B Firms	
	f	%	f	%
0 %	1	1.1	10	12.2
1-10 %	23	25.6	24	29.3
11-20 %	33	36.7	25	30.5
21-30 %	16	17.8	14	17.1
30+ %	17	18.8	7	10.9
Total	90	100	82	100

Since the ratio of R&D expenses in the operating expenses is between 21-30% for travel agents and 11-20% for F&B firms, it can be concluded that travel agents pay more attention to the R&D than F&B firms. However, for both of them one can say they have considerable expenses amount for R&D

activities. By mean the ratio of trainings expenses in the operating expenses is between 1-10%, for both travel agents and F&B firms. Thus, it can be concluded that both travel agents and F&B firms expenses for training is insufficient and travel agents and F&B firms do not pay enough attention to the job trainings of their staff although hospitality industry is demanded human workforce and it is important to satisfy guests for hospitality industry.

Considering the ratio of inexperienced staff in travel agents, 11-20% comes first followed by 30+%, respectively. Since the ratio of inexperienced staff is high, it can be concluded that the participant travel agents prefer to recruit inexperienced staff. On the contrary, ratio of inexperienced staff in F&B firms are low, 1-10% comes first followed by 0%. Since the ratio of inexperienced staff is low F&B firms, it can be concluded that the participant F&B firms prefer to recruit experienced staff. In addition, it can be seen in Table 4, the ratio of the staff who knows at least two foreign languages is 11-20% for both travel agents and F&B firms. This ratio is low for hospitality industry because in hospitality industry staff should now at least two foreign languages to serve guests and satisfy them.

The correlation analysis was performed to reveal the importance of intellectual capital on organizational performance in hospitality industry. Results of the correlation analysis of travel agents are given in Table 5.

*Table 5: The Importance of Intellectual Capital on Organizational Performance in Travel Agents*

	Human Capital	Structural Capital	Relationship Capital
Performance	.279	.319	.454
Sig.	.008*	.002*	.000*
*Correlation is at 0.05 level			

Results of the correlation analysis of F&B firms are given in Table 6.

*Table 6: The Importance of Intellectual Capital on Organizational Performance in F&B Firms*

	Human Capital	Structural Capital	Relationship Capital
Performance	.225	.268	.437
Sig.	.042*	.015*	.000*
*Correlation is at 0.05 level			

The results of the correlation analysis in order to reveal the main aim of the study, which is “intellectual capital sub-dimensions human capital, structural capital and relationship capital is important for organizational performance of travel agents and F&B firms” are given in Table 5 and 6. According to results, there is a moderate correlation between organizational performance of travel agents and their human capital, structural capital and relationship capital, respectively. Similarly, for F&B firms we can say there is a moderate correlation between organizational performance of travel agents and their human capital, structural capital and relationship capital, respectively. As long as the human capital, structural capital and relationship capital of travel agents and F&B firms increases, their organizational performances will also increase.

## 6. Conclusion and Recommendation

The purpose of research is to reveal the importance of intellectual capital travel agents and F&B firms as a hospitality industry sectors. For this aim questionnaire was prepared and employed to managers of travel agents and F&B firms in Antalya, Turkey. Some of major conclusions and suggestions are as follows:

- There is a moderate correlation between organizational performance of travel agents and their intellectual capital. Thus, travel agents need to increase their existing intellectual capital to increase their organizational performance.

- There is a moderate correlation between organizational performance of F&B firms and their intellectual capital. Thus, F&B firms need to increase their existing intellectual capital to increase their organizational performance.
- The ratio of R&D expenses in the operating expenses is between 21-30% for travel agents and 11-20% for F&B firms. It is low for F&B firms. As known, technological change is so rapid, thus hospitality industry need to adapt these changes to serve quality services to guests. Travel agents and especially F&B firms in Antalya should increase ratio of R&D expenses in the operating expenses to compete with other destinations.
- The ratio of trainings expenses in the operating expenses is between 1-10%, for both travel agents and F&B firms. This ratio is low for hospitality industry. Travel agents and especially F&B firms in Antalya should also increase ratio of trainings expenses in the operating expenses to increase their human capital and organizational performance.
- The ratio of inexperienced staff in travel agents is higher than the ratio of inexperienced staff in F&B firms. As said before it is important to have intellectual capital to increase organizational performance. Therefore F&B firms and especially travel agents in Antalya should recruit experienced staff.
- The ratio of the staff who knows at least two foreign languages is %11-20 for both travel agents and F&B firms. This ratio is low for hospitality industry. Therefore F&B firms and especially travel agents in Antalya should recruit multilingual staff or they should pay staff to learn language.

For above reasons and recommendation, we can conclude that it is important to register intellectual capital for firms in order to measure true value of firms. For that reason, governments should prepare regulations regarding this matter.

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## Loyalty Programme Benefits, Relationship Quality and Loyalty in South Africa (An Exploratory Study)

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### Extended Abstract

#### Introduction

The Fast Moving Consumer Good (FMCG) retail marketplace is highly competitive and in order to succeed, retailers need to differentiate their offerings to their target markets. One of the main marketing methods used to achieve this is by making use of customer relationship management instruments. The main objective of a relationship marketing strategy is the retention of customers by making offerings that serve to benefit both parties within the relationship. One popular method is the issuing of, or connecting with, a loyalty programme (LP) (Meyer-Waarden, Benavent & Castéran, 2013). A LP is defined as a programme that is run over the long term, allowing members to gather some form of currency as they purchase goods. This can then be redeemed in exchange for cash or other rewards and gifts (Liu & Yang, 2009).

#### Literature Review

The frequency and ease with which FMCG customers can switch from one retailer to another is challenging (Meyer-Waarden & Benavent, 2009). Relationship building would be one way in which to make this less tempting to customers. Relationship strength is often measured by means of Relationship Quality (RQ) which consists of three elements, namely trust, satisfaction and commitment (Vesel & Zabkar, 2010). Trust is described as the consumer placing his/her confidence in the fulfilment of needs by the retailer concerned (Liu, Guo & Lee, 2011), whereas commitment is the belief that the relationship between the retailer and the customer is important enough to pursue indefinitely (Morgan and Hunt 1994). Satisfaction is the result of contentment, as customer expectations are met or exceeded (Van Vuuren, Roberts-Lombard & van Tonder, 2012). All of these elements contribute towards loyalty.

Loyalty programmes have increased in number in South Africa, with the focus on obtaining loyal customers (eNCA, 2014). This is emphasized by environmental transformation and informed and demanding customers. As major retailers make significant investments in loyalty programmes, the question arises whether this is worthwhile. Some researchers state that LPs are unnecessary (Kreis & Mafael, 2014), whilst those in favor believe that they serve to both alter and encourage shopping behavior (Kearney, 2013).

A study was proposed to investigate the benefits inherent in these programmes in South Africa and their impact on RQ and customer loyalty between the cardholder and the retailer. LP benefits come in various formats, with varying effects on RQ and loyalty. The study focused on three forms of benefits that are evident in LPs in South Africa. The first one is tangible and probably the most common. Described as consumeristic, this type of benefit is exemplified in rewards such as cash-back, discounts, free product and prizes (Eason, Bing & Smothers, 2015), and sometimes termed as monetary or economic. An additional two categories of benefits could be viewed as intangible have been identified, despite the fact that there could be some tangible items that are exchanged within the transaction.

One is described as egoistic which is more personal and self-serving with resulting emotions such as pride, status and belonging (Feiler, Tost & Grant, 2012). Alternatively altruistic rewards revolve around more selfless feelings that would usually be attached to rewards that are donated to another party such as a school or charity (Kareklas, Carlson & Muehling, 2014). Tangible rewards in this transaction do not serve to enrich the card-holder. The card holder will potentially experience an intangible reward associated with the act of benevolence.

Despite LPs becoming more popular with retailers and research more prolific, there are still gaps that remain in the understanding of LPs, the benefits thereof, and customers' relationships with them (Meyer-Waarden, Benavent & Castéran, 2013). Although much research has been conducted in first-world countries, less has taken place in South Africa. To this end, this study seeks to investigate how different forms of LPs contribute towards RQ and customer loyalty between the consumer and the retailer. This would contribute towards the growing body of research that has both theoretical and practical significance in the field of LPs in the South African marketplace.

It will examine the factors of trust, commitment and satisfaction which make up RQ, and in turn, customer loyalty. Furthermore, it will question whether different types of loyalty programme benefits might have a greater effect on RQ, with particular emphasis on altruistic, egoistic and consumeristic types. This will assist business in isolating which types of benefits would be more likely to resonate with customers. It has been noted that although a number of prominent FMCG retailers in South Africa have adopted or accept loyalty cards, others have not yet adopted, or have no intention of ever adopting a loyalty programme. Any research on this topic should be of both academic interest and provide answers to retailers who are still questioning the usefulness of loyalty programmes.

### **Methodology**

This was an exploratory study, carried out prior to a larger quantitative study. It was made up of two focus groups, used to gauge attitudes and opinions of individuals that held membership of LPs linked to FMCG retailers.

The sample was a convenience one. Participants were obtained by means of emails to university staff, business contacts and associates. Nevertheless a broad selection of both race, gender and age ended up taking part. Fifteen individuals participated in the groups. Each focus group session was audio recorded and then transcribed into a Word document. Transcripts were read and common themes were highlighted. The volume of data did not warrant the use of analysis software.

### **Results**

Results from the focus groups showed that most respondents preferred an immediate and tangible reward where they were able to associate the purchase with the benefit. Loyalty did not appear to be a foregone conclusion when consumers were in possession of a loyalty card, despite the positive experience of receiving a reward.

A number of respondents spoke of the problems that they experienced with understanding the workings of the programme, redeeming rewards and a lack of information about what was actually available to them as programme members.

Considering the benefits linked to the programmes, respondents' attitudes toward altruistic programmes were also mixed. Possibly exacerbated by the difficult economic times in South Africa, respondents felt that prices were already too high and that it was the retailer's responsibility to donate to charity. Despite this, they did understand the good that could come from such a programme and appreciated it when they were seen to be associated with this type of contribution. In particular this was apparent when the respondent was closely associated with the charity (for example their children's school).

Programmes that were sponsored by major medical aids, and linked with the retailer, rewarded members for making healthy purchasing decisions. Respondents enjoyed being recognized for their exemplary purchasing habits, as well as enjoying the monetary rewards. However, this did not necessarily translate to loyalty, as members stated that they often compartmentalized their shopping, preferring to shop for price or other factors when they purchased the remainder of their products.

With respect to satisfaction, trust and commitment, responses varied between different programme types. Some respondents were satisfied with their programmes. This was mainly towards programmes where the cardholder was kept well informed and could clearly link purchases with their rewards. In contrast, when they felt that they had to do all the work and programmes were difficult to understand, less satisfaction was apparent. The element of trust was connected to the same issues. Clients felt more trusting when communication was clearly part of the programme. Expiration of points before they could be redeemed affected trust, with cardholders feeling that they had been deceived. Commitment was heightened when cardholders felt that benefits from the programme exceeded costs incurred. Loyalty to a retailer can be described as the customer patronising that store regularly and making recommendations to others (Cant & du Toit, 2012) Although some programme members felt that they were loyal to the retailer, they stated that this was not necessarily a direct result of the loyalty programme, and sometimes viewed the programme as an additional bonus that came after the fact. Customers who felt that all the programme contributed to was an increase in prices were more promiscuous, hopping from one retailer to the other as they searched for good offers.

### Conclusion and Discussion

This qualitative research was a pre-cursor to a larger quantitative study that will follow. Results gleaned from the focus groups will be used to substantiate the choice of material for the questionnaire. The focus groups have indicated that opinions differ with respect to programme types, relationship quality and customer loyalty. The results have shown that communication is key in order to establish relationships and loyalty. Furthermore, programmes need to be uncomplicated and clearly defined in order to promote satisfaction and trust. Cardholders should feel that they are receiving the points that they have earned and that redemption is simple and clearly connected with expenditure. Rewards should be seen to be providing the customer with value in return for costs incurred.

### Keywords

Loyalty programme, relationship quality, customer loyalty, fast moving consumer goods

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## **Logistics Communication – Important Factor of Successful Business: Case Study for SMEs in Moravian-Silesian Region**

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### **Abstract**

The aim of the paper is to analyze the logistical communication with suppliers and customers in the SME sector in the Czech Republic, especially in Moravian-Silesian Region. To fulfil the objectives the article is divided into two parts. The first part contains a search of available literature on the topic. The second part consists of the results of the research, which was conducted with the owners and managers of SMEs in Moravian-Silesian Region, which operated in the market to January 1, 2014. Finally, the main findings are presented in the area of dominance of logistics communication channels, number of used channels, the importance of individual channels for communication of companies and their surroundings and the relationship between the type of logistics communication channels and line of business and interdependence among communication channels used to communication with suppliers and customers.

### **Keywords**

Logistics communication, communication channel, innovation, Moravian Silesian Region, SME

## 1. Introduction

People and communication – two articles, which cannot exist without each other. Communications – exchange of information has always represented a key condition for human coexistence. Misunderstanding, i.e. bad communication can be found as one of the causes for all conflicts – from wars through marital crisis to the loss of a customer.

Channels through which people exchange information, have a long historical development. In earlier times there were smoke signals, Morse code or a courier on the horseback. A significant milestone in the historical development of communication channels was 14 February 1876, when American physicist Scottish descent A. G. Bell knocked on the doors of US patenting authority and brought to the world new technology for speech transmission using an electricity. People have got a new communication channel – telephone, which significantly accelerated and improved the quality of communication.

Without readily available and accurate information current business is totally unfeasible. Tomas Bata, who argued that via phone we can handle quickly and reliably whatever needs signature fully was aware of the fact that time is money, and that information is a key factor for success in business. (Sodomka, 2006) As in other enterprises goes slowly, through official channels, it is handled here often in seconds or in minutes (Zelený, 2005). The phone is no longer the only communication channel used under the customer-supplier relationships.

Importance of quality, accurate and timely information as a prerequisite for successful business is emphasized in every literature, every professional forum. However, is there consistency between theory and practice? What communication channels are currently used by companies within their customer-supplier relationships? Are companies willing to innovation in this field?

The middle evaluation of the quality of the business and its impact on businesses is implemented at the international and national levels. At the international level there are composite indices, which uniformly examine a set of conditions that could be linked to the development of business activities. However, regional disparities and specificities may remain hidden. Therefore, we ask the question what is the current level of the business environment in the SME sector in the field of communications and logistics. The aim of the paper is to analyse the logistical communication with suppliers and customers in the SME sector in Moravian-Silesian Region.

## 2. Problem Formulation

On the scientific scene a businessman and his personality are still considered as an important source of inspiration for exploring of ways of thinking, and in terms of solving of ongoing economic processes. An entrepreneur may be characterized not only as a person who establishes new enterprises, but also creating innovation and offering new products and services (Stiglitz & Driffil, 2000). On his economic position and tasks we can view from several perspectives. Entrepreneurship is seen as a process, in which four main areas are highlighted: (i) a businessman as part of the economic system and its own enterprise, (ii) a businessman, as a part of economic activities, (iii) business activities, as resources resulting from the initial entrepreneurial motives and finally (iv) dynamics of business behavior in the market (van Praag, 2005; Thurik & van Dijk, 1998).

The aforementioned attributes resulting from the business environment, can be found early in the economic literature that mentions business issues. The significance of dynamic strategic behavior has been already described by J. B. Say (1855): "knowledge used for creation of a product for consumption is the mission of entrepreneurs." Also A. Marshall (1920) puts emphasis on flexibility and survival of

the fittest. Age and size of the enterprise are considered the basic variable influencing the quality and speed of dynamic decision making (Cunningham & Lischeron, 1991; Harrison, 1994).

Business should lead to innovations and then it is also sustainable (Drucker, 1995). From this point of view entrepreneurship and innovation are presented as a stable and measurable variables that affect sustainability of entrepreneurial society. However, known Drucker's definition is preceded by Schumpeter (1976), who pointed out that innovation, which will be offered on the market, clearly will shift the economic balance of the market, due to the fact that the entrepreneur has discovered a new opportunity and created new value, an entrepreneur significantly will affect the further development of strategic use of resources. This requires additional entrepreneurial skills that will lead to success and create an active pressure on the dynamic change of strategy (Pennings, 1982; Katz, 1991; Ripsas, 1998). Since the beginning of the transformation process in the new EU member states, it was clear that the goal of the post-communist countries is to achieve economic level of Western European economies in a certain time period. When looking at regional data but it is evident that the process of real convergence does not take place in all regions with the same intensity. For this purpose it is necessary to characterize the kind of phenomena and processes taking place in these regions, because they may be the reason why these differences either persist or even intensify.

Economic performance and regional competitiveness are important factors in regional development. Competitive region is attractive (pull investments, expertise and its hallmark is the location of enterprises and positive migration balance). The real convergence process is observed at both national and regional level, the most commonly used indicator is the gross domestic product (GDP) per capita, respectively its growth rate. Generally, if the GDP growth rate for countries or regions with low GDP per capita is higher than in developed economies and regions, then there is space for gradual convergence.

Innovation and knowledge policy is one of the tools that help to reduce disparities. High competitiveness in the global economy can only be achieved by introducing innovations in production and services in EU Member States (Lipková, 2012). Innovation is the key not only to creating more jobs, building a greener society and improving our quality of life, but also to maintaining our competitiveness on the global market (Kordoš, 2014).

SMEs account for around 99% of all enterprises in the EU. These businesses are crucial importance, because they generate approximately 2/3 of all jobs (Juříček, 2010). These enterprises are also major innovators that are in the EU knowledge-based economy indispensable. Therefore, it is necessary to pay adequate attention to SMEs.

Enterprises can implement a variety of innovative activities, among others to innovate its processes. One of the processes, without which a sustainable business is not possible, is the quality of communication both internally and with the surrounding business entity. Especially in the context of companies linking to supply chains communication and the associated information transfer grow in importance. The supply chain can be understood as a network of interlinked and dependent organizations, which operate on the basis of cooperation, joint control, management and improvement of physical and information flows from suppliers to end users (Christopher, 2000).

If the company wants to sustain in the market, it must behave pro-customer, because the customer is the bearer of income. A satisfied customer is one that receive from the company not only satisfaction of his demand for the product or service, but also receive a large listing of added values in the field of information based on communication in the supply relationship. On the supply chain it cannot be viewed only from the perspective of the end of the chain (B2C), but it must be understood in its entire length (B2B) and not only in itself ordering and delivery of the product, but also for example in the area of service and reverse logistics. Logistics communication is an essential part of management of the

supply chain and processes across the chain. Logistics communication means all information exchanges associated with the order cycle, i.e. communication with suppliers, customers, logistics providers and internal communication.

Without the cooperation relations in the framework of the course of material and information flows there is not the existence of the supply chain and the importance of information transmission in this context is increasingly emphasized and analyzed (Lukoszová, 2012). Proper application of logistics methods and tools enables independent firms to efficiently manage the flow of materials and processes not only within these companies, but also throughout the supply chain. The interdependence enables SMEs to achieve greater competitiveness.

Innovation is also evident in the field of communication. Under the pressure of market organizations are being forced to adapt their communication channels so as to be able to quickly and efficiently view information on computer screens or on increasingly smaller mobile screens device (Dorčák, Štach & Pollák, 2015). Communication between sub-units should be improved at every level of the organization to streamline networking concept in practice (Průša, 2010). Because supply chains are dependent on vast amounts of information in real time, it is essential that the information can be transferred seamlessly across organizations (Murphy & Wood, 2011).

The individual segments of the supply chain are forced to innovate types of communication channels that are used when exchanging information in the supply chain. Vydrová (2010) describes development of communication by saying that face to face communication and traditional written communications are increasingly being replaced by so-called electronic communications. Is this also in SMEs in Moravian-Silesian Region (MSR)?

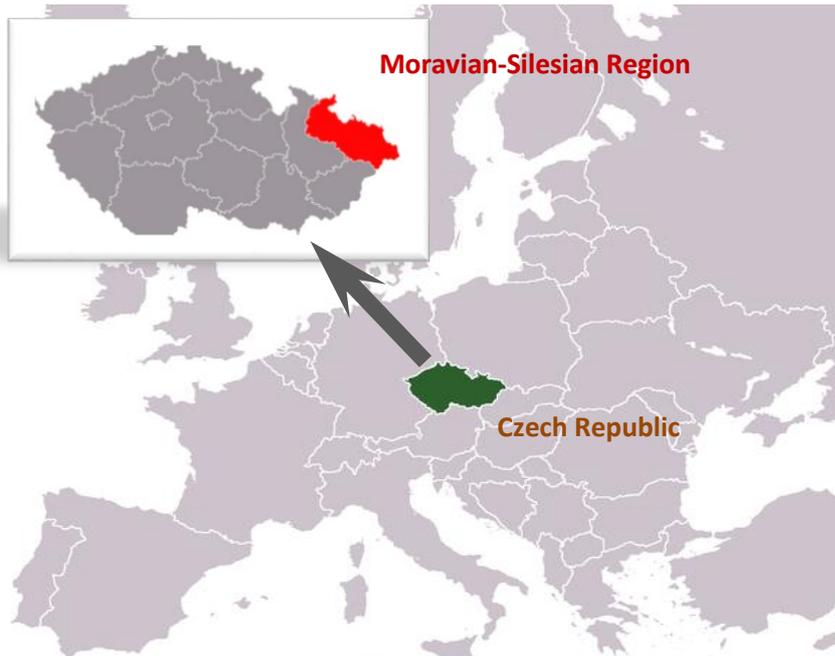
Evaluation of the business environment quality and its impact on enterprises is implemented at the international and national levels. At the international level there are composite indexes that uniformly examine a set of influences that could be linked to the development of business activities. However, regional disparities and specificities may remain hidden. Therefore, we ask the question: what is the current level of the business environment in the SME sector in the field of logistics communications? The aim of this paper is to analyse the logistic communication with suppliers and customers in the SME sector in Moravian-Silesian Region.

### **3. Characteristic of Moravian-Silesian Region**

Moravian-Silesian Region (MSR) is one of 14 regions in the Czech Republic. It is located in the northeast of the Czech Republic and is one of the most peripheral parts. In the north and east it borders with Poland, in the southeast with Slovakia, see Figure 1. Cross-border character of this region provides opportunities for effective cooperation in the sphere of production, infrastructure development, and environment protection, cultural and educational activities and in the field of tourism. According to the European regional classification MSR is NUTS II and NUTS III simultaneously.

Area of MSR is 5,427 square kilometers, i.e. 6.9% of the territory of the Czech Republic. More than half of area of the region is agricultural land; over 35% is comprised by forest lands (especially in the mountain areas of Jeseníky and Beskydy).

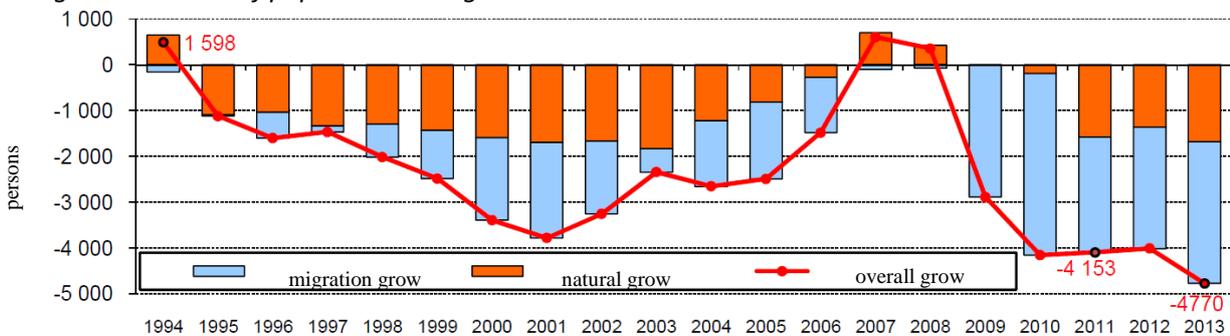
Figure 1: MSR location



Source: adapted from RVP (2016), Vlast (2016)

Moravian-Silesian Region has nearly 1,220 thousand inhabitants and is the third most populous region in the Czech Republic. However, MSR is one of the regions with the fewest municipalities. If we take population in 1995 as a starting index of 100, then the population in 2012 only amounted to an index of 94.5. Population decline is caused by low birth rate and since 1993, unlike the rest of the Czech Republic, also by migration, see Figure 2. (CSO)

Figure 2: Factors of population changes in MSR



Source: Czech Statistical Office

Since the 19<sup>th</sup> century MSR belongs to the most important industrial regions of Central Europe. Industry is concentrated in the Ostrava-Karvina industrial and mining basin. The region is a national center of metallurgy and black coal mining. Besides these traditional sectors there are production and distribution of electricity, gas and water, production of vehicles (Hyundai Motor Manufacturing Czech) and the chemical and pharmaceutical industries.

Despite the current slow-down of heavy industry and mining more than a third of the total of 549.1 thousand persons employees in national economy, another 12% in trade and repairs of goods.

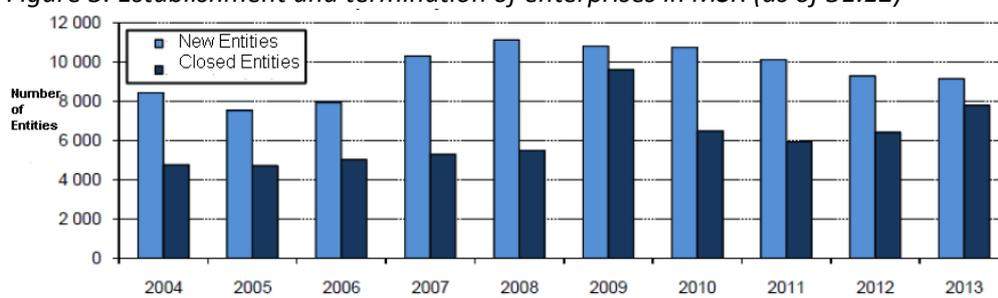
Total gross domestic product (GDP) has always been higher than the national average. However, if we focus our attention on GDP per capita, we can see that the strong position of the MSR disappears. GDP per capita in the region is comparable to the average, but without the Prague region. The difference

between high-income of the Prague region and the rest of the Czech Republic affects the average values, which was the reason for the removal of this region from this average. This fact, that is a huge gap between metropolitan areas and the rest of the country, is also typical for most European countries.

The industrial structure of the MSR is currently causing many problems that are particularly associated with a higher proportion of unemployed persons. At present MSR is the second region with the highest registered unemployment rate in the Czech Republic. Really hot problem is the share of long-term unemployed (over 12 months) in the total number of unemployed, which is in MSR above the national average. This situation is also reflected in the number of applicants per vacancy.

The number of newly registered businesses and that where ceased may provide partial response to the unsatisfactory development of the functioning of the labor market. From Figure 3 it is clear that from 2009 the number of newly formed businesses continuously decreases, while the number of defunct entities grows. This one in combination with unsuitable qualification structure of the workforce illustrates the problems in the functioning of the labor market in MSR.

Figure 3: Establishment and termination of enterprises in MSR (as of 31.12)



Source: Czech Statistical Office

In terms of environmental quality MSR belongs to the most polluted regions in the Czech Republic. The most severe environmental impacts are concentrated in the central and northeastern parts of MSR (Ostrava, Karvina and Třinec). On the other hand, there are also places with important natural localities.

#### 4. Methodology

To obtain quantitative data, questions were asked by questionnaire to the randomly selected businesses that operated on MSR between years of 2011-2013, and fulfilled the criteria of size and turnover, according to EU requirements for classification of SMEs. Firm age classification was based on the research methodology of Global Entrepreneurship Monitor, which considers enterprises as incumbents with age older than 42 months. (Lukeš & Jakl, 2012).

The research was conducted within the project "Sustainable Business and its support in the context of the expected socio-economic development of Moravian –Silesian Region", financed from the budget of the Moravian-Silesian Region, program RRC/07/2014, project registration number 14/2014 and took place in autumn 2014.

The research was focused on a range of areas related to business - the reasons for the enterprise formation, business environment in the region, cooperation with the region and pumping of grants, strategic business management, personnel policy, innovation and business development, and external communication.

It was used writing questioning associated with prior telephone or personal contact. This type of questioning was preferred over using of electronic polling due to low returns, identified during the pilot survey, where the response rate did not exceed 10%.

To determine the sample size statistical approach was used. The sample size  $n$  was calculated by using the formula (Olaru, Dinu, Stoleriu, Şandru & Dincă, 2010):

$$n = \frac{t^2 \cdot p \cdot (1-p)}{\omega^2}, \quad (1)$$

where:

$t$ ...confidence level, corresponding to probability with which the accuracy of the results will be guaranteed, from the statistical tables of the Student distribution;  
 $p$ ...prevalence, probability or proportion of the sample components that will explore the problem;  
 $\omega$ .....acceptable margin of error.

In level of significance  $\alpha = 0.05$   $t$  value is 1.645;  $p$ -value = 0.1699 was counted as proportion of businesses, which were active in year 2014 in MSR (250,028) to whole number of businesses in the Czech Republic 1,470, 929 (CSO [online], 2015);  $\omega = 0.05$  was acceptable error limit of 5 %. So minimal sample size is

$$n = 1,645^2 \cdot 0,1699 \cdot (1 - 0,1699) / 0,05^2 = 153 \text{ respondents.}$$

From 400 randomly interviewed respondents (SMEs) we have received 285 completed questionnaires, but 70 of which had to be excluded for several reasons. For statistical evaluation 215 (53.8%) valid questionnaires (215>153) have been used.

Questionnaire design and its processing (computerization, coding) have been conducted in collaboration with the Institute of interdisciplinary research of SU OPF. For data processing Remark Office has been used. MS Excel has been used for formation of data matrix and SPSS statistical software has been used for statistical analysis. Obtained data have been numerically coded. Some results have included the data in the form of qualitative evaluation of responses (verbal scale for the selection of responses), and therefore data quantification have followed.

The total internal reliability has been measured using Cronbach's alpha, which have had value of 0.845, while partial analyses internal reliability of data have ranged around values 0.79, which satisfies the condition for further data analysis (Nunally, 1978).

For modeling the relationships basic statistical methods have been used. Cramer's contingency coefficient  $V$  which represents the most appropriate measure of association between two nominal variables was one of the most important. Scale, introduced by Cohen (1988) for the correlation coefficient, was used for coefficient interpretation. For predictive interpretation the formulation, that can be found in the work of Liebetrau (1989), was also used, where the degree of significance between 0.25 and 0.5 means a factor in the causal linkage and value between 0.7 and 0.9 makes it possible to predict the factor behavior in the next period.

Research was conducted in order to determine:

- identify the type of logistics communication channels;
- determine the number of communication channels use by enterprises;
- identify importance of individual communication channels;
- determine relationship between the communication channel and business;

- determine relationship between the types of channels that are used for communication with suppliers and customers.

## 5. Problem Solution

Research has been conducted in all districts of MSR; the percentage of respondents in each district corresponds to the percentage proportion of economically active enterprises in this region. In terms of legal form the sample can be classified as follows: limited liability companies (45.6%) and self-employed persons (39.5%) make up the largest share, joint stock companies make up the third place (12.1%). Other types of enterprises are presented only in small amounts (up to 1%).

In terms of number of employees microenterprises (enterprises up to 9 employees) are the most occurred group. Small enterprises (10 – 49 employees) are in second place, while the actual number of workers is close to the lower limit of the group. Medium-sized companies are represented marginally.

Firms with turnover between 10 to 100 million CZK dominate in the sample. An analysis of turnover shows that entrepreneurs without employees occur most frequently in the group with turnover of up to 1 million CZK. This group includes also the portion of limited liability companies, when enterprise is often made up of one owner and a few employees. The higher level of turnover is evinced by companies with 50-249 employees.

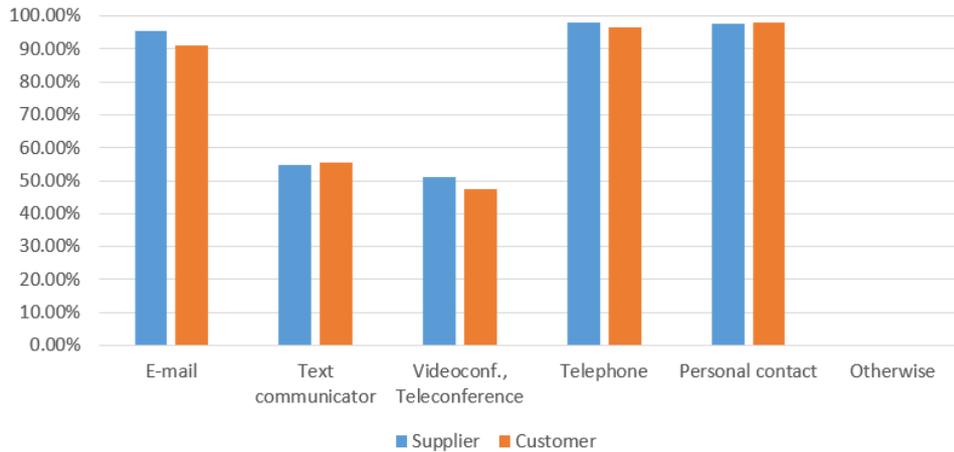
In terms of business constitute the group of companies, which the line of business is trade (36.28%) is the largest, closely followed by companies dealing with services (33.95%) If we want to get to know the services sector, in the SME sector we can find hospitality services, financial consulting, training, repair, rental, fitness and wellness services. The third group in the ranking are companies engaged in the building industry (13.95%), followed by industrial companies (10.70%). Farmers (1.86%) and companies dedicated to public service (3.26%) have the smallest share.

In the sample we can find the relatively new companies (exist up to 5 years), but also enterprises, that operated in the market even before the change of political regime in 1989. The firms created in the nineties are the predominant group. A positive factor is that the prevailing stage, despite the age business is growth in the last three years (49.77%). This group is completed by enterprises that are in the peak of its business (15.81%). In contrast, decrease was identified in 31.63% of enterprises.

Figure 4 shows the use of communication channels for communication with a supplier and a customer. From this figure we can see that any of the communication channels is not used in 100% of cases. This represents a change from the research, which was realized in 2013 (Čemerková, 2015; Čemerková, 2014) when the telephone was used in 100% of cases. Still, the telephone is the dominant communication channel and for communication with suppliers takes the first place (211 companies, 98.14%). In communication with customers it takes second place (96.74%, 208 firms).

In communication with suppliers telephone is closely followed by personal contact (210 companies, 97.67%). Communication via e-mail occupies the third place (95.35%, 205 firms). Text communicators, videoconferences and teleconferencing are used by about half of the companies. Strangely respondents have not mentioned any other type of communication channel for communication with suppliers, see the figure 4. The same situation we can see in the case of communication with suppliers, where possibility otherwise has also not been occurred.

Figure 4: Use of communication channels for communicating with the firms surroundings



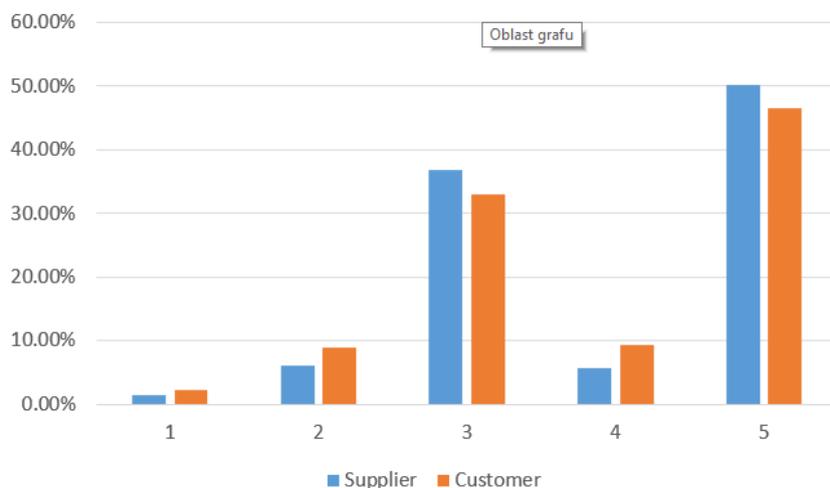
Resource: Own research

In communication with customers we have expected a high proportion of personal contact, because many companies are recently focused mainly on services. The survey showed that the personal contact is the most frequently used channel (211 enterprises, 98.14%). For many people communication via e-mail is common, so this type of communication occupies the third place (91.16%, 196 firms).

Except the telephone and personal contact communication channels received in communication with suppliers and customers the same position in terms of frequency. It is striking that no company has added any type of communication channel than was offered. Does this mean that classical correspondence has vanished? This can be a rather doubtful.

In the questionnaire survey it has been interest to know how many channels for communication with suppliers and customers is used. The answer to this question we can see in the figure 5. In both cases, i.e. in communication with the supplier and customer, similar results have been received. The trend is to use multiple communication channels. In the case of a questionnaire survey it has been found that most companies use 5 channels, respectively 3 communications channels. Only a tiny percentage (1.4%, resp. 2.32%) of companies use a single communication channel.

Figure 5: Number of communication channels for communicating with the firms surroundings



Resource: Own research

In the survey, respondents also evaluated the importance of individual communication channels. Used channels have been rated on the scale from 1 to 6, where 1 is the highest priority, 6 the lowest priority.

On the basis of this evaluation average grade have been calculated for each type of channel, see table 1. For communication with suppliers, telephone (1.76) and email (1.94) have the highest priority. Personal contact have gained 2.23 mark. For communication with customers, the highest priority has personal contact (1.73), telephone has earned 1.86 rating, e-mail has received third place (2.31).

*Table 1: Average importance of using communication channels*

	Supplier	Customer
E-mail	1.94	2.31
Text communicator	4.03	4.06
Videoconference, Teleconference	4.55	4.60
Telephone	1.76	1.86
Personal contact	2.23	1.73

Resource: Own research

Relationship between communication with suppliers and line of business we can see in the table 2. For communication with suppliers, personal contacts is used by all companies dealing with agriculture, industrial production, building industry and provision of public services. In contrast, only 89.04% of companies dealing with services use personal contact. In this group of enterprises, as in the case of trade companies, there is no communication channel is represented by 100%.

*Table 2: Communication with suppliers vs. line of business*

Line of business	E-mail	Text communicator	Videoconference, Teleconference	Telephone	Personal contact
Agriculture	75.00%	50.00%	50.00%	75.00%	100.00%
Industry production	100.00%	65.22%	65.22%	100.00%	100.00%
Building industry	100.00%	80.00%	73.33%	100.00%	100.00%
Public services	100.00%	42.86%	42.86%	100.00%	100.00%
Trade	96.15%	50.00%	46.15%	96.15%	97.44%
Services	87.67%	47.95%	43.84%	93.15%	89.04%

Resource: Own research

With regard to personal contact and communication with customers in case of enterprises dealing with services there is similar situation to communication with the suppliers - personal contact is not used 100%. For these companies, as well as trade enterprises any communication channel is not again represented 100%. Other relationship between communication with customers and the core of business we can see in the table 3.

*Table 3: Communication with customers vs. line of business*

Line of business	E-mail	Text communicator	Videoconference, Teleconference	Telephone	Personal contact
Agriculture	75.00%	50.00%	50.00%	100.00%	100.00%
Industry production	100.00%	65.22%	60.87%	95.65%	95.65%
Building industry	100.00%	80.00%	73.33%	100.00%	100.00%
Public services	85.71%	42.86%	42.86%	100.00%	100.00%
Trade	92.31%	52.56%	39.74%	96.15%	98.72%
Services	84.93%	46.58%	41.10%	91.78%	93.15%

Resource: Own research

Table 4 shows relationship between the communication channels used for communication with suppliers and customers. The data in the table are the basis for testing the hypothesis that there is a relationship between channels used for communication with the suppliers and the customers.

Table 4: Communication with supplier vs. communication with customer

		Customer				
		E-mail	Text communicator	Videoconference, Teleconference	Telephone	Personal contact
Supplier	E-mail	89.77%	55.35%	47.44%	88.84%	87.91%
	Text communicator	53.49%	52.09%	46.05%	52.56%	53.02%
	Videoconference, Teleconference	50.23%	47.91%	46.51%	49.30%	49.77%
	Telephone	91.16%	55.35%	47.44%	95.35%	96.28%
	Personal contact	89.30%	55.35%	47.44%	94.42%	96.74%

Resource: Own research

Using the Cramer's contingency coefficient  $V$  dependence has been demonstrated in communication via personal contact ( $V = 0.44$ ), email ( $V = 0.48$ ) – a factor in the causal linkage text, communicator ( $V = 0.88$ ) and videoconference and teleconference ( $V = 0.89$ ) – it makes possible to predict the factor behavior in the next period. In other words, it is expected that the communication channel that the enterprise uses for communication with the suppliers will be also used for communication with customers.

## 6. Conclusion

For SMEs based in the MSR is typical use for information transfer between a company and its surroundings telephone and e-mail. An important role is also played by personal contact, and especially for communication with customers. A classic way of written communication e.g. letters appears to be in retreat. It has been probably replaced by a more modern form - by e-mail. Simultaneously, however, it can be stated that there is not significant use of modern technologies (text communicators, video chats, and teleconferencing) to interact with the environment in these enterprises. In terms of importance telephone, e-mail and personal contact are for enterprises evaluated as a priority. The research also confirmed that if the SME uses a specific communication channel towards its suppliers the same logic also applies to its customers.

For logistics communication enterprises use multiple communication channels. The choice of communication channel is certainly influenced by the nature of the transmitted information, demands for speed and accuracy. The transition to more modern forms of communication indicates the awareness of enterprises in this area and the need to adapt as a factor of success in today's globalized market.

The change in the use of communication channels requires a radical change of strategy objectives and practices of the company. Any change, however, usually finds resistance, including migration to new channels of communication. In contrast, the ever-increasing customer demands and efforts to provide in compare with competitors in the eyes of the customer better level of customer service eventually force the company to seek new, more modern ways of communication within the supply chain.

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## The Influence of Wine Attributes On the Selection of Wine among a Cohort of South African Generation Y Consumers

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### Extended Abstract

#### Introduction and Background

The South African wine industry, an industry once characterized by high profit margins and prosperity, has experienced growth stagnation coupled with rapidly increasing production costs over the past decade (2005-2015). While the average income for grape producers have increased 43.8%, the weighted average production cost combined with the average packaging cost increased by 94% over the same period (2005-2015) (SAWIS, 216). In other words, the trend of marginal growth coupled with increasing production costs is unsustainable in the long run.

It is imperative that the domestic South African wine industry needs to grow the wine consumer market and all indications are that the Generation Y consumer, entering the wine market for the first time with significant purchase power, should be the focus of these efforts (Chrysochou, Krystallis, Mocanu & Lewis, 2012; SAWIS report, 2009; VinIntell: Generation Y, 2013; VinIntell: Future scenarios, 2013). As scant formal research results are available on the importance of wine attributes to Generation Y consumers, a thorough understanding of the wine consumption behavior of these consumers in South Africa is needed (VinIntell: Generation Y, 2013). Thus, the purpose of this semi-replication study (Chrysochou, et al., 2012) was to firstly, determine the relative importance that Generation Y consumers indicate for 13 wine attributes in their selection of wine. Secondly, the attributes were compared to one another to determine whether they were significantly differentiated in the mind of the consumer in terms of importance. In so doing so, we hope to contribute to the body of knowledge on this important and emerging wine consumer market segment.

#### Methodology

Quantitative data was gathered from a convenience sample (n=428) of South African university students, by means of a paper and pencil questionnaire. The majority of respondents (95%) were between the ages of 18 and 21 with 57% male and 43% female participation.

The relative importance rating of each of 13 wine attributes was elicited using the Best-Worst Scaling method (BWS) (Marley & Louviere, 2005; Goodman, Lockshin & Cohen, 2005). During BWS

respondents are asked to indicate the most and least important attribute from a subset of all attributes. The 13 attributes were combined into 13 subsets of four items each using a Balanced Incomplete Block Design. Respondents were asked to choose which attribute most and least influenced their selection of wine in each subset of attributes. A mixed model repeated measure ANOVA, with the attributes as the fixed effect and the respondents as the random effect, were used to determine whether the 13 attributes were viewed as different in importance from each other by respondents (mean comparison).

## Results and Discussion

### Importance of wine attributes

The BWS scores that each wine attribute obtained in the present study are presented in Table 1. The highest BWS score was obtained for *Tasted the wine previously with Someone recommended it* in second place. This finding is supported by the research conducted by Chrysochou et al. (2012). *Taste* is the result of a direct experience with the wine which suggests that young wine consumers attach high importance to prior experience with a wine. *Someone recommended it* on the other hand is a form of word-of-mouth communication, most likely from a primary reference group such as family or friends. The importance of *Someone recommended it* could indicate young wine consumer's preference for subjective knowledge over objective knowledge when selecting wine as suggested by Barber, Dodd & Ghiselli (2008).

Table 1: BWS scores

No	Attribute	Most	Least	Aggregate BWS	Mean of individual BWS	SD of individual BWS
1	Taste	1223	38	1185	2.76	1.33
2	Someone recommended it	1078	83	995	2.32	1.58
3	Brand	639	148	491	1.14	1.57
4	In-store promotion	614	277	337	0.79	2.15
5	Medal/Award	373	331	42	0.10	1.76
6	Grape variety	363	482	-119	-0.28	2.13
7	Attractive front label	257	392	-135	-0.31	1.75
8	Matches my food	267	449	-182	-0.42	1.88
9	Information on back label	190	513	-323	-0.75	1.69
10	Read about it	141	502	-361	-0.84	1.45
11	Information on shelf	152	668	-516	-1.20	1.59
12	Region of origin	124	764	-640	-1.49	1.74
13	Alcohol level below 13%	74	847	-773	-1.80	1.76

The relative importance of *Brand* among young wine consumers could indicate status concerns and consequent status consumption of wine and open the opportunity of marketing premium and ultra-premium wines to young consumers. The importance of *In-store promotion* could be attributed to lower levels of product knowledge and the reliance on external sources of information such as in-store promotions, for quality and status cues (Teagle, Mueller & Lockshin, 2010). The relative importance of *Medal/Award* indicates that young wine consumers choose wines that are prestigious and wines that have the potential to communicate status. It can also be argued that young wine consumers use a medal or award as a quality indicator when choosing a wine due to the fact that they lack knowledge about wine (Chrysochou et al., 2012). The importance of *brand* and *medal/award* is an indication that young wine consumers use extrinsic product attributes as decision heuristics to simplify decision making with regards to wine and use these attributes in selecting a good quality wine.

On the other end of the spectrum the attribute with the lowest BWS score was *alcohol level below 13%* which is consistent with the research done by Chrysochou et al. (2012). This is not surprising as the alcohol percentage of wine is generally between 12% and 14%. *Region of origin* was also not important, indicating that young wine consumers were not concerned with the origin of the wine. A possible explanation for this result could be increased globalization, where young consumers are exposed to products from all around the world.

*Information on shelf, read about it* and *information on back label* were of little importance. These attributes are all firm controlled information sources which young wine consumers seem to find unimportant - a finding consistent with previous research (Chrysochou et al., 2012). Young South African wine consumers seem to attach less importance to attributes related to marketing information about wine. Thus, it can be postulated that consumers have little desire to seek information about wine (especially printed), posing a serious obstacle for wine marketers that needs to be addressed in an innovative and creative manner.

### **Differences between attributes**

All attributes were statistically significantly different from one another with the exception of two groups of wine attributes. *Grape variety, attractive front label* and *matches my food* occupy the same level of importance in the mind of the Generation Y respondents. Similarly, *information on back label* and *read about it* were also regarded as similar in level of importance. These results imply that consumers are confident about which attributes are most and least important to them when purchasing a bottle of wine, but find it difficult to distinguish between those attributes that they have a weak or no opinion about.

### **Implications, Limitations and Suggestions for Future Research**

Marketers within the wine industry can use the findings to more effectively design and target products and marketing strategies to young wine consumers. The development of a strong brand is imperative. This should be followed by product trial and exposure to the brand that stimulates communication (interpersonal and social media). These efforts should be innovative and create the necessary buzz, as young wine consumers place limited importance on written information about wine products. Notwithstanding the useful contributions of the study the limitations regarding the nature and size of the sample should be noted. This study is the first of its kind in a South African context and can serve as the foundation from which subsequent studies can be conducted.

### **Keywords**

Generation Y, wine attributes, South Africa, best-worst scaling

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## Possible Measures in the Area of Revenue and Sales in Times of Crisis

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### **Abstract**

Regarding different causes which have led to the crisis in the company, its type, available assets and characteristics of the company, it is not possible to apply one of the generally accepted models, concepts or approaches for crisis solving. In spite of difference of positions, due to the characteristics of the crisis, it is however possible to describe certain measures which are most commonly applied for crisis healing by companies. Such measures can be classified in several groups. One of the most important area when the company is faced with crisis are the measures to be prepared and executed in the area of revenue and sales where the crisis is usually shown mostly as declining sales in value and/or quantity. Such measures can be: increase in sales, selection of production – sale assortment and levelling prices. In the paper the measures from the field of revenue and sales in times of acute crisis in a company are explained, together with some empirical evidence from the Slovenian business practice.

### **Keywords**

Crisis, crisis management, crisis measures, revenue, sales

## 1. Introduction

All crises create a distressing, uncertain and worrisome situation, which endangers property as well as people, and influences established business and life flows, which is why we want to resolve this situation as soon as possible. Crises in the wider socio-economic environment directly or indirectly affect the position of individual companies or other organizations which may be more or less connected with the broader scope of the crisis. A crisis in one sector may have a significant negative impact on the companies from completely different sectors.

The extent of the crisis is simultaneously reflected in several areas, making it a complex or multidimensional phenomenon, affecting the economic, social, traditional, psychological and legal aspect, their contents are described in the following Table 1. When dealing with crises it would be highly recommended to take these aspects into consideration.

*Table 1: The dimensions of a crisis – crisis as a multi-aspect phenomenon*

Aspect of the crisis	Content
The economic aspect	<ul style="list-style-type: none"> <li>• endangers property as well as people and influences established business and life flows,</li> <li>• redistributes the positions of market participants,</li> <li>• changes the principles of success and increases the threshold requirements for survival.</li> </ul>
The social aspect	<ul style="list-style-type: none"> <li>• changes the behavior of the participants in the crisis,</li> <li>• redistributes the positions of individuals and certain groups in society,</li> <li>• and increases the proportion of individuals below the threshold of economic and social risks.</li> </ul>
The traditional aspect	<ul style="list-style-type: none"> <li>• brings a break with previous practices – i.e. business models, structures, processes, systems, strategies and culture – and starts a new business life cycle of the organization,</li> <li>• new foundations for the construction of the core capabilities of the organization and competition factors are required,</li> <li>• and it brings new management ideologies and approaches.</li> </ul>
The psychological aspect	<ul style="list-style-type: none"> <li>• promotes a state of tension and conflicts between the participants of the organization, worry, stress and uncertainty,</li> <li>• promoting the culmination of problems of the organization with only two possible solutions – the ruin or survival, resulting in a change in the “psychological profile” of the organization and its members,</li> <li>• incidence of disease symptoms of the organization and its members.</li> </ul>
The legal aspect	<ul style="list-style-type: none"> <li>• requires a greater consideration of additional specialized laws and implemented policies, primarily of obligation, equity and insolvency law,</li> <li>• a more strict compensation and social responsibility of the management,</li> <li>• draws the functioning of the organization closer to the edge of legality and legitimacy.</li> </ul>

A crisis is a short-term undesired, unfavorable and critical situation in a company (organization), directly endangering the existence and further development of this organization and is caused by an intertwined and simultaneous action of both external and internal sources (Dubrovski, 2004; Dubrovski, 2011, p. 31; Barnet & Pratt, 2000; Barton, 1993; Crone, 2007; Fearn-Banks, 2011, p. 2; Fink, 1986; Grünert, 2007, p. 9; Heath, 1998; Hermann, 2008, p. 211; Homel, Knecht & Wohlenberg, 2006, p. 33; James & Wooten, 2010, p. 17; Kraus & Becker-Kolle, 2004; Lalonde, 2008, p. 24; Lerbinger, 1997; Neubauer, 1999, p. 8; Roux-Dufort, 2003, p. 51; Slatter, 1987).

## 2. Special Characteristics of the Management of Companies in Crisis

Crisis management comprises planning, organizing, directing and monitoring companies (organizations) experiencing difficulties that directly endanger their existence and further development and its purpose is to stop negative trends by achieving a drastic change and providing the foundation for redevelopment.

The divergence of measures is not only reflected in the time dynamics of the anticipated outcome of the applied measures, but also by the profitability–survival relation, since the company undergoing an acute crisis does not follow the goal of a positive operational outcome during the rehabilitation phase, but firstly the short-term goal of survival which probably results in a negative outcome, and the entity–parts relation where specific parts of the company are in a better shape than others; however, the solution must be prepared for the company as a whole (potential restructuring of assets must be taken into consideration), for which a successful balance must be established.

Crisis recovery in a company can only be successful if applied on all business levels of the company and it is therefore essential during recovery (reorganization) to ensure the simultaneous implementation of measures for solving the crisis in two basic areas, namely (cf. Kraus & Glass, 2004, p. 121; Seefelder, 2007, p. 27):

- business (substantive, operative) recovery,
- financial recovery.

Although a crisis in a company is directly reflected in the financial area (insolvency, deep debts, negative cash flow, etc.), it is actually only the result of developments in other (substantive) areas. Recovery projects are thus frequently focused only on solving financial problems, instead of directing attention to other areas, which are being neglected (“we could solve the crisis with additional financial resources”). For example, financial consolidation alone cannot bring positive results, if the product/service range is outdated, if excessive costs are being generated, if key personnel have left the company, if product quality is questionable etc.

Considering the variety of reasons causing the crisis, the type of crisis, available resources and the specifics of a company, no general model, concept or approach for solving a crisis is available. A latent crisis cannot be solved by adopting the same measures as in the event of an acute crisis. Or a strategic crisis by using the same approach as in the case of a liquidity crisis. We will also not attempt to solve problems in realizing development goals the same way we solve a stagnant crises. In a small company different principles and guidelines are applied in comparison to a large company system and the actions taken in a service company are different from those taken in a manufacturing company. Generally, the applied measures for a corporate enterprise and for a non-profit organization will differ. Because of the diversity and complexity of each individual crisis there is therefore no general recipe or formula.

### **3. Different Measures Instead of Generally Accepted Guidelines for Crisis Solving**

Regarding different causes which have led to the crisis in the company (Bellinger, 1962, p. 58; Bibeault, 1999, p. 28; Boeckenfoerde, 1993; Boin, 2008, p. xxiii; Crandall, Parnell & Spillan 2014, p. 55-65; Crone, 2007, p. 9; Harz, Hub & Schlarb, 2006, p. 45-46; Kraus & Becker-Kolle, 2004, p. 15-16; Lymbersky, 2013; Mitroff, Pauchant & Shrivastava, 2006, p. 51; Müller, 1986; Pate, 1999, p. 55; Pümpin & Prange, 1995, p. 201; Richardson, 1994; Slatter, 1987, p. 25-55, 1990; Schellberg, 2008, p. 57; Wildemann, 2004, p. 193), its type, available assets and characteristics of the company, it is not possible to apply one of the generally accepted models, concepts or approaches for crisis solving. Different principles and guidelines of proceedings will be applicable in a small company in comparison with a large business system, accordingly, proceedings in a service company will differ from those in a production one. Measures, as a rule, will be different also when comparing a profitmaking company and a non-profit organization. Even before a company starts to deal with crisis healing, it must, in any case, examine and determine the influence of the which had led to the emergence of the crisis, otherwise it will not be possible to achieve the desired effect. In spite of difference of positions, due to the characteristics of the crisis, it is however possible to describe certain measures which are most commonly applied for crisis healing by companies.

a) *Management and organizational measures:*

- replacement of the management (those who have provoked the crisis cannot heal it, since such a state of affairs usually exceeds their capabilities, their methods and style of managing have proved to be inappropriate);
- centralized managing (the authoritative managing in a period of crisis is more effective than the cooperative type, the crisis manager explicitly takes over all the responsibility for centralized business decisions);
- changed and adjusted organization (network and apparently chaotic organization prevails which is based on project-type solving of problems);
- effective communicating (both ways: among stakeholders within the company and between the company and its surroundings; the company is to enforce such a policy of communications which will be based upon thoughtful and reports prepared in advance).

b) *Financial measures:*

- insuring liquidity (it is more important to insure - receive sufficient in-flow and, in this way, preserving at least minimal liquidity rather than balance sheet success);
- restructuring of external funding (extending due dates, replacing existing obligations regarding creditors with new ones, cut of due interests, conversion of debts with ownership stakes, providing new creditors for development, limiting long-term investments and advancing smaller short-term investments).

c) *Expenditure measures:*

- reducing various types of costs (the structure of costs is to be analyzed, the costs are to be defined and possibilities of cost reducing are to be assessed), however, in connection with the endeavor for increase in sales.

d) *Staffing measures:*

- decrease of the number of employees (in many cases a decrease of the number of employees has sadly been the only measure used by the management; if other measures for business and financial improvement do not follow – are not carried out at the same time, the operational state will remain unsuccessful and the only victims are dismissed workers – in this case the method of downsizing is not justified);
- replacement of middle and lower management (particular holders of management positions do not measure up to success criteria set up by the new appointed manager; replacements are carried out in accordance with the better successor principle; the replacement is to take place only when a new manager, who fulfils new requirements, is in place);
- acquirement of new staff (business practice has shown that a crisis team is in most cases set up on basis of the reputation of the manager with whom others are prepared to work, while giving up other short term benefits).

e) *Measures in the area of revenue and sales:* explained in the following chapter.

The described measures for crisis healing can only be used as guidelines for preparation of company improvement programmes. Since it usually deals with deep, radical and dramatic measures, a particularity ensues in the managing the crisis healing that manifests itself in (inter alia) required sacrifices that companies must endure in order to escape from the threat of a winding-up.

## **4. Revenue and Sales Measures**

### **4.1. Stemming a decline in sales or increasing sales**

A decline in sales and revenue is expected during a crisis. Ensuring a sufficient revenue level is therefore critical; however, the main problem is that a decline in sales must first be stopped and then transformed into growth, which can take a longer period of time and certain investments with time-delayed results, whereas a company in acute crisis has only a limited amount of time and limited resources for investing in the market and new programmes. It is even worse when the rationalization of operations or cost reduction takes a long time to take effect. Immediate efforts to increase sales, which are practically the basis of a company's existence, are therefore essential. However, they must be carefully selected.

It is usually not possible to improve sales without an appropriate marketing approach or intensified marketing activities, which will reduce the time spent at the office on account of field visits to buyers. It is important to differentiate between the measures aimed at securing short-term profits and inflows and those geared towards the long term and focused on development. Occasional careful marketing communication can have a positive public impact, as a company in crisis is often subject to rumors about it discontinuing sales, collapsing or going bankrupt.

An assessment of sales opportunities is fundamental to the planning of other business measures. Once a realistically achievable level of sales (revenues) has been estimated for a given period, taking into account all the measures that can be taken in this regard, the operating costs need to be adjusted accordingly. If the costs cannot be lowered below an achievable level of sales, the continued existence of the company is doubtful, as it does not have a sufficiently developed core business to at least conditionally (subject to the implementation of other measures) generate positive results (operating profit).

Stopping the decline in sales is an immediate short-term measure, whereas increasing sales is a more mid-term measure, due to the time gap between the initial activities and inputs on one hand and the actual results on the other, which can be contradictory to the efforts of ensuring liquidity resources for establishing a minimal financial solvency. That is why in this context companies are more likely to opt for the form of sales increase that will ensure an immediate or fast positive cash flow.

Although the crisis "forces" a company to take short-term measures and the efforts to increase sales revenues are actually mid-term measures (in the short-term only produce more costs), these mid-term measures must be implemented at the very beginning of the company's recovery project. The sooner actions to increase sales begin, the sooner the results will be visible.

While it is indeed necessary to begin resolving a crisis with short-term solutions, it is true that this is only the first step, which is essential but on its own insufficient for the reorganization of a company and must be supported by activities associated with further development for post-crisis business. For example, short-term incorrectly directed marketing strategies can therefore cause long-term problems and damage the value of the programmes or even the entire company (e.g. reckless cost reduction to reach at least partial sales stabilization, a decrease in quality to cheaper materials). Because the image of the company and its products can suffer in a crisis, the main focus must be aimed at product quality and the correction of any eventual faults in the product.

### **4.2. Pruning the product and service portfolio**

During a crisis, where the top priority is to resolve the situation threatening the company's existence, there is usually neither time nor opportunity to thoroughly restructure the product and service portfolio and market strategy, which is better reserved for the stage of revitalization following the

resolution of the acute crisis. It is possible, however, to prune the existing portfolio and boost the sale of products and services that are the most favorable for the company in terms of profitability, value added, the available technological, manufacturing and human resources and their impact on cash flow, while discontinuing the sale of those causing business process failure and inefficiency, providing, of course, that the market permits it. To ensure at least minimal solvency, the focus will often be on products and services that can immediately generate inflows that exceed the outflows, i.e. a positive cash flow.

Pruning the product and service portfolio often means focusing on key opportunities and offerings, whereas the company will spend less effort dealing with ancillary and complementary lines or even sell them off or discontinue them, as a company in crisis simply cannot dedicate sufficient resources to non-core lines. Since the discontinuation of less favorable products and services (narrowing/cutting down lines) is almost always associated with downsizing, both measures need to be properly coordinated (impact on fixed costs).

Pruning the product and service portfolio is not an easy task. Problems with the product and service portfolio are among the most difficult challenges of crisis management. Measures in this area should be supported by an appropriate information system that provides a breakdown of costs by cost object. The proportion of costs that cannot be directly attributed to individual cost objects is rapidly increasing as a result of technological advancement, resulting in an increase in the level of arbitrariness and associated errors in cost allocation and the determination of the cost price of products and services. Inaccurate information on costs can quickly lead to inappropriate business decisions.

Pruning product and service lines also leads to pruning customers (or markets), as it is best to focus on key customers and systematically prune the rest.

Focusing on key activities and lines is thus a short-term measure aimed at stemming negative trends in acute crises and needs to be followed by product portfolio and marketing restructuring, whose positive impact will normally only become apparent in the long term. Once the company's negative trends have been stemmed and the acute crisis brought under control, the product portfolio and marketing restructuring can be implemented on the basis of carefully conducted studies with consideration of long-term market prospects and the company's own capacities (market repositioning). The general strategic product and market focus needs to be geared towards boosting the production and sale of products with a higher value added.

#### **4.3. Increasing or reducing prices and modifying other terms of sale**

Improving liquidity and solvency is essential in an acute crisis. This includes securing a positive cash flow, which can be done in a variety of ways and combinations. Cash flow is most easily improved by modifying the conditions of sale and purchase, which includes increasing prices. The cost savings associated with pruning product lines and markets will come with a certain delay, and an even longer delay can be expected in efforts to increase sales and revenue.

An increase in prices will have an effect similar to an increase in sales, reflecting directly in higher revenue. However, this measure can be very difficult to implement, as it normally requires the consent of the customers. Regardless, commercial practice has shown that companies in crisis frequently neglect or simply forget to modify their pricing policies even though this is a perfectly reasonable measure given the constantly rising prices of raw materials and is normally acceptable to customers. Pricing-related measures are therefore often limited to the simplest measure, i.e. reducing prices to increase sales and inflows, which can lead to extremely negative consequences later on, when the crisis has been resolved and the company once again begins to grow. It is a fact that a price increase will require delicate negotiations with customers, which can sometimes be unpleasant and can even

jeopardize well-established relationships. Whether a company is able to increase its prices depends on its negotiating skills and the position of its products (low or high demand). Product-service combinations (multiple services added to a tangible product; an improved “package”) offer more room for price increases, as competitive services are more difficult to compare with each other.

An innovative pricing policy should therefore not be based solely on price reductions (certain customers are still willing to pay more). A well-thought-out pricing policy also requires proper cost management, yet small entrepreneurs in particular neglect to determine and break down their operating costs and ascertain their impact on pricing and sales, which naturally makes it difficult to determine prices and other terms and conditions of sale in a systematic manner. Massive price reductions should be avoided at all costs, as they hinder regrowth after the crisis is resolved. Pricing is therefore one of the most important issues in a crisis and needs to be carefully thought out to prevent an opposite effect later on, in the growth stage. The matter of pricing is less delicate during times of expansion, however, when the higher demand makes up for minor errors in pricing policies.

Products that have been in stock for a prolonged period of time and could not be sold due to their unacceptable price are now best sold at an attractive reduced price, and though, if the products have not been written off (i.e. their book value has not been adjusted), this can result in accounting losses (extraordinary expenses, devaluation), it can also have a positive impact on liquidity and cash flow, which, in turn, will provide the urgently needed recovery (bridging) funds. In such sales, the costs of keeping funds tied up in inventory (taking into account the costs of any bank loans), security, storage and the ageing and potential obsolescence of the products should be weighed against their realistic potential to sell in the future, when they are even older.

However, the terms of sale include other components in addition to prices, such as payment terms, packaging and labelling costs, transport and insurance clauses (Incoterms), minimum quantity restrictions, joint marketing campaign costs, payment instruments, security instruments, obtaining various licences and certificates, etc. Whereas prices are always at the center of every negotiation, less attention is given to the option of modifying other terms and conditions of sale (purchase), the benefits of which can far outweigh the negative impact of price reductions, especially in international trade. Yet practice has shown that companies often fail to appreciate how modifying the terms and conditions of sale can improve their position as sellers (buyers) as well as their cash flow.

## 5. Empirical Evidence

Previous studies of Slovenian business practices (Dubrovski, 2009; Dubrovski, 2010) have found that companies in receivership rarely choose to modify their business models (a system of interconnected and interdependent activities that determines the way the company “does business” with its customers, partners and vendors, Amit & Zott, 2012, or the way the company delivers value to a set of customers at a profit, Johnson, 2010: 7), which would turn currently inefficient business practices into a successful operation and grant the company its further survival and development (cf. Amit & Zott, 2012). As mentioned earlier crisis recovery cannot be successful if it is not applied simultaneously in business (substantive) and financial areas (e.g. Kraus & Glass, 2004, p. 121; Seefelder, 2007, p. 27). An insolvency procedure is a process, not a solution (Miller, 2008, p. 202), which gives a company time and access to new ways of financing for the recovery and renewal. A compulsory arrangement is thus only one of the steps in saving a company, which, however, does not ensure its successful future business, but is vital for the implementation of further steps to solve the crisis (threat of bankruptcy).

Out of 163 studied cases of companies in compulsory arrangement (in-court restructuring), only 14 (8.6%) included in their key recovery measures the introduction of the new business model which should represent a healthy fundament for further successfulness and as many as 91.4% of companies focused only on the various forms of financial restructuring (without any serious changes in business

orientation and operations). Of particular interest to this paper is the finding of one of those studies that nine out of the 163 companies included in the sample had successfully completed a financial restructuring or negotiated an arrangement with their creditors but then went bankrupt within nine months, invariably because they did not take adequate measures in relation to revenue and sales, approached the issue incorrectly or failed to formulate proper strategic goals.

## 6. Conclusion

The extent of the crisis is simultaneously reflected in several areas, making it a complex or multidimensional phenomenon, affecting the economic, social, traditional, psychological and legal aspect. One of the most important area when the company is faced with crisis are the measures to be prepared and executed in the area of revenue and sales where the crisis is usually shown mostly as declining sales in value and/or quantity. Such measures can be increase in sales, selection of production – sale assortment and levelling prices.

Nine out of the 163 studied cases of Slovenian companies in acute crisis between 2009 and 2014 also completely neglected to take any measures in relation to revenue and sales whatsoever and consequently went bankrupt less than a year after exiting receivership. Only from financial restructuring a distress company cannot ensure its further existence and development. A well prepared and executed compulsory arrangement is often a necessary, yet insufficient condition for achieving a drastic change and ensuring re-development in a company, especially, the measures in the area of revenue and sales will be needed.

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## The Asymmetric Relation between Energy Consumption and Economic Growth: Non-Linear Panel Cointegration and Causality Tests

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### Abstract

The main purpose of this study is to examine the nonlinear asymmetric relationship between energy consumption and economic growth using data from OECD countries covering the period from 1970 to 2014. The casual relationship between energy consumption and growth has always been of interest to energy economists as well as policy makers due to the increasing importance of the energy in growth and development of nations. Since the slow global economic growth due to high-level energy prices in the 1970's, a large number of studies have analyzed the relationship between energy consumption and economic growth. Many studies suggest that energy consumption is positively correlated with economic growth. However, the empirical evidence is mixed and conflicting. The results seem to be different on the direction of causality and its long-term versus short-term impact on energy policy (for an extensive literature review, see Ozturk, 2010). The directions of this causal relationship between energy consumption and economic growth could be categorized into four types each of which has important implications for energy policy. They are namely, 1) No Causality; 2) The uni-directional causality running from economic growth to energy consumption; 3) The uni-directional causality running from energy consumption to economic growth; 4) Bi-directional causality.

The main objective of our study is to empirically investigate each of the causality directions between energy consumption and economic growth employing non-linear asymmetric panel co-integration and panel causality tests. To our knowledge, this is the first empirical study to develop and employ this new advanced econometric technique in the literature. Meanwhile, the study acknowledges the biases in the presence of cross-sectionally dependent panels. Sieve bootstrap methodology is used to derive co-integration tests for cross-sectionally dependent panels.

## The Effect of US Presidential Elections on the Volatility of Stock Returns

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### **Abstract**

This paper investigates the impact of the U.S. elections on the stock market volatility by regressing daily percentage changes in implied volatility during the election periods between 1992 and 2012 on three key variables: percentage changes in the probability of success of the candidate who belongs to the opponent party of the current president, the absolute value of the percent change in the probability of winning the elections of one of the two candidates, and a measure of election uncertainty. The association between implied volatility and the election probability of the eventual winner is positive and statistically significant. These findings indicate that the presidential election process engenders market anxiety as investors revise their expectations regarding future macroeconomic policy.

## Hedging Fuel Price in the Canadian Public Sector

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### **Abstract**

The paper develops a rationale for the potential usefulness of hedging in the public sector based on reducing the volatility of cash flows and thereby improving budgeting and forecasting capabilities. This achieves a more optimal allocation of resources, as the size of the fuel budget surplus or deficit at the end of the year is minimized. The allocation is more efficient because it decreases the likelihood of pursuing low priority projects in the case of a surplus or taking away from high priority projects in the case of a fuel budget deficit. The methodology uses derivatives to hedge fifty percent of aviation fuel purchases for a two year period. The results show that such a strategy can reduce the standard deviation of the monthly purchase price.

## Performance of Female Firms in East Europe and Central Asia

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### **Abstract**

Results of empirical analyses of female underperformance vary widely, and the variance can be explained by the differences in both the measures of performance and the characteristics of the sample of firms selected. In some cases, gender differences are found to explain a significant share of the differences in performance while in others, with different control variables and sample sets, the differences shrink or disappear. Here, World Bank Enterprise Survey data for 27 Eastern European and Central Asian countries are used to evaluate claims concerning female underperformance. The analysis is based on three levels of factors identified in theories about underperformance, namely the firm, the sector and the external institutional environment of the country in which the firm is located. These multiple levels provide a set of control variables that allow for more precise estimation of the link between female ownership or management and firm performance. An ordered probit estimation procedure is applied to three samples of firms, those with information on female managers for all available years and those with information on female ownership and female management for the one year in which data on female management are available. Results for female owned firms, with performance measured as employment growth, suggest that female ownership in itself is not determinate of firm performance, but that some specific characteristics of these firms are significant, for example a country's level of enrollment of females in tertiary education. Comparison of female owned with female managed firms yields similar results overall, with the exceptions that female.

## The Banking Union: Single Supervisory Mechanism – a view on the tools of Basel III

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### Extended Abstract

Establishing a single mechanism in autumn 2014 will launch a project of the ‘European Banking Union’. The impulse for contemplating its creation was the financial crisis of 2008, which drew attention to systemic weaknesses in the current structure of the European Monetary Union. The Banking Union consists of two already functioning basic pillars (SSM, SRM) and one under preparation (EDIS), as well as basic regulative rules (CRD IV/CRR, BRRD, DGSD).

On 15 October 2013, the Council of the European Union adopted the Single Supervisory Mechanism regulation, which created a single supervisory mechanism related to credit institutions in the Eurozone and possibly other EU member countries.

This mechanism is the first pillar of the European Banking Union. The SSM includes Euro-area countries and countries outside the Euro area which can enter the mechanism. The decisive SSM body is the European Central Bank (ECB).

The Banking Union is supplementary to the Economic and Monetary Union (EMU) and the internal market, which harmonizes the responsibility for supervision, problem solving of banks, and financing on the EU level, and forces banks throughout the Eurozone to observe the same rules. These rules ensure, in particular, that banks assume certain risks, so that a bank that makes an error accepts liability for its losses and, if exposed to the danger of closing, the taxpayer’s expenses must be minimized (Magnus, Backman & Power, 2015).

For the sake of clarity, the Banking Union may be expressed as an “equation”:

$$BU = SSM + SRM (SRF + SRB) + (BRRD + DGSD) + (CDR IV + CRR),$$

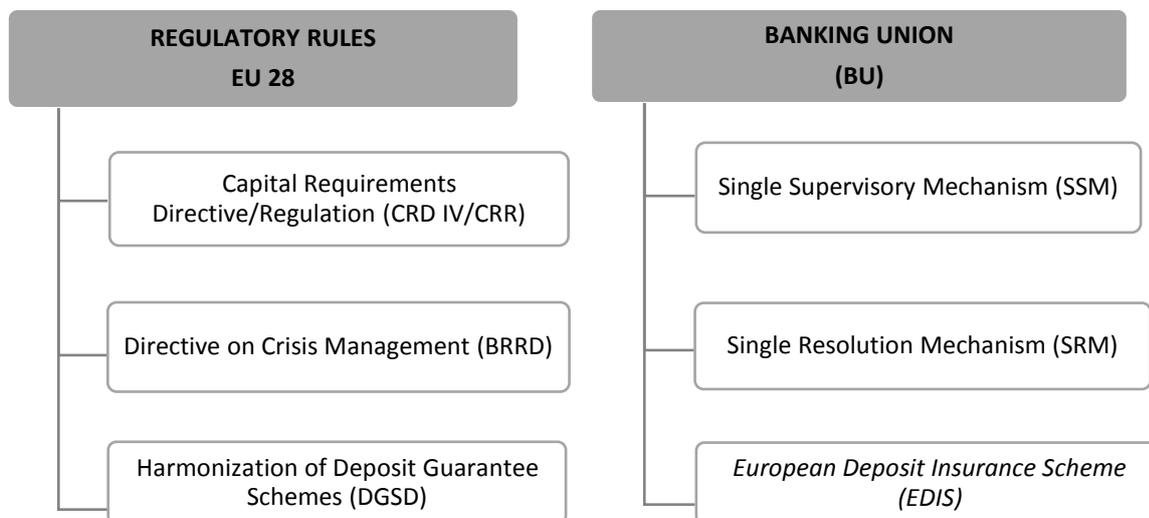
or graphically (Fig. 1). Each individual part has its reasons, aims, legislative backup, and mostly its own institutional instruments and classification.

In reaction to the financial crisis of the year 2008, the initiatives of the supervisory and regulatory authorities were created in the line: Group G20 → Financial Stability Board → Basel Committee on Banking Supervision (BCBS) → legislature of EU → national legislature. The proper European initiatives were comprised of the line of the Council of EU → Legislature of EU → National Legislature.

The main directions of “global” regulatory changes (Tomšík, 2015):

- increasing the resistance of banks against the adverse development;
- providing the ability of banks to absorb losses and to perform recapitalization from private sources, i.e. without the use of taxpayer money.

Figure 1: Pillars of the Banking Union, rules and regulations



Source: Author

Globally enhanced regulatory systems set up primarily the so-called Basel Accords, especially the new reform Basel III. Within the European Union a financial regulation known as the CRR / CRD with a corresponding serial number (Capital Requirements Directive), based primarily on the above-mentioned Basel Accord, also applies.

Table 1: Development of the Basel reform

	Effective since	Risk approach	Characteristics
<b>Basel I</b>	1993	Inadequate risk management	Very simple application. Easy reduction of regulatory capital without significant restrictions or risk transfer (easy regulatory arbitrage).
<b>Basel II</b>	2006	Higher risk sensitivity	Effect on a change in the behaviour of banks. A number of gaps allowing banks to evade unpleasant consequences of regulation.
<b>Basel III</b>	2019 (full implementation)	Very high risk sensitivity	Removing gaps of Basel II. Significant impacts on business portfolio, liquidity and balance sheets of banks. A significant increase in the qualitative and quantitative regulatory capital requirements.

The goal of the contribution is to analyse the minimum and total capital requirements in some countries of the European Union (the Czech Republic, Sweden, Germany, Slovakia) and to compare mutually the amount of total capital reserves between them. Special attention will be given to the new foresightedness-wise tools within the framework of Basel III intended for conserving the capital of a bank – the capital conservation buffer, the systemic risk buffer and the countercyclical capital buffer. An analysis of the supervision over the banking sector in the mentioned countries will be made with regard to a comparison of the access of the supervision and regulation in the countries where the uniform European supervision mechanism has been mandatorily introduced, and vice versa in countries outside of the Eurozone.

A conclusion will be made whether it is advantageous or disadvantageous for states outside the Eurozone to enter the European Single Supervisory Mechanism for banks, defining the positive and negative impacts resulting from it.

## Sustainability and Social Responsibility, the effect on Profit Margins

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### Extended Abstract

Currently, there has been a trend among different industries throughout the world to implement more ethical sound processes on every aspect of their business operations. The trend has been based on the deficiencies that several corporations have arisen after several wrong-doings occurred throughout different industries around the world. Customers and governments have been monitoring corporations more closely in the recent years. In the present time there are two terms that are in vogue, one is Sustainability, and the other is Corporate Social Responsibility. Often, being misrepresented in the consciousness of individuals, since both terms are close to each other but do not depict the same meaning.

Sustainability is a term that is related directly to environmental means of a corporation to provide ecological means that allows entities to preserve natural resources. The World Commission on Environment and Development on its 1987 Report, defined Sustainability as “meeting the needs of the present (generation) without compromising the ability of future generations to meet theirs.” (The World Commission on Environment and Development, 1987) The United Nations have also adopted the same meaning on its 1992 Conference on the Environment and Development (United Nations, 1993) Ever since, environmental efforts have been considered necessary to adopt the lesser usage of pollutants, towards recycling, and efficiency in the usage of natural resources. Governments throughout the globe have enforced new regulations towards achieving such goals.

Corporate Social Responsibility is a term related to ethical behavior performed by corporations. It has been defined as: “the continuing commitment by business to behaving ethically and contributing to economic development while improving the quality of life of their workforce and their families as well as of the community and society at large.” (Sims, 2003) Previous scandals from unethical corporate behavior have been condemned by Governments, and individuals ever since. Non-profit organizations, and the United Nations have advocated for several decades towards achieving an improvement of corporate practices specifically correspondent for ecologically fit decisions. Several harmful cases have been evidenced by international press, and through social media, some of these cases have reached judiciary courts.

From both definitions is concluded that a corporation needs to undergo more ethically sound and ecologically fit investments in terms of complying with the requirements from National Governments, and the public scrutiny. This in some cases implies for Corporate Officials that the Corporations’ profit margins will be reduced, such cases will be analyzed by assessing through Global Indexes that depict the presence of Sustainable, and Socially Responsible Corporations.

This paper would depict on its theoretical framework the development of the terms Sustainability and Corporate Social Responsibility throughout the years. The focus of the theoretical framework is to shape up the differences between the two terms, and how to make an interrelation between the terms for Corporate Purposes, specifically for large international corporations who face different intricate

regulations from the different countries where they operate. A depiction of Corporate Officials not abiding Sustainability or Social Responsibility Standards in countries where regulations tend to be loosen in comparison to their headquarter country, will be depicted as well.

Subsequently, an assessment of both Corporations that have complied versus those not complying with the Sustainable Development, and Social Responsibility Standards, according to Global Indexes, will be compared in terms of profitability to revise the effect that the implementation of applicable standards will impact their potential of profit margins. Different statistical techniques will be performed using information from different industries, sectors, and different countries of origin to obtain results from testing the following hypothesis:

H<sub>0</sub>: There is no significant difference between the means of the Abiding Corporations vs Un-abiding Corporations.

H<sub>1</sub>: There is a significant difference between the means of the Abiding Corporations vs Un-abiding Corporations.

The expected results are that H<sub>1</sub> will prevail as a prevailing hypothesis, proving that Abiding to Sustainability and Social Responsibility Standards improve the net results of International Corporations.

The reasons for expecting such results is the fact that customers trust more in Corporations that have a better Social Image of abiding to Governmental Regulations, and those being aware of the environment; thereof, acquiring more products from such suppliers.

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## Towards Integrated Measures and Measures with Conscience

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### Extended Abstract

#### *Context*

If inequality is one of the 'gifts' of civilization and progress rarely equally distributed, thereby creating a more unequal world as Deaton, (2013) is claiming; and also that the superiority of capitalism is warranted in that inequalities are a small price to pay for benefits as Cannon, (1992) stated, then there must be serious scepticisms about the measures we used in accounting and finance. Humanism civilized all things, and made man the measure of them; it also humanized the man who was its measure (Frayn, 2006). The more radical the sceptical question is, the more it can encourage the search for truth and the design of measures that can give ethical structure to civilization. Pythagoras coined the Man-Measure-Maxim: "Of all things the measure is the man, of things that are that they are, and of things that they are not that they are not" and believed that once numerical structure was grasped, we would have control over the world...a method of reckoning, giving a sense of harmony (Russel, 1959). The lack of harmony in our civilization is obvious and in this paper the measures of man are placed under the proverbial trans-disciplinary magnifying glass with special reference to measures used in accounting and finance. If we want to overcome this world paradox, we must start from the knowing subject, the accountant and the decision-maker as the measure and identify all the variables connected to his measure.

#### *Pure and heavenly measure*

Several great minds interpret this maxim differently over the years. Plato, at the time, revised Protagoras Maxim to state that because perceptions differ from man to man, people can only judge something on the basis of their own measures. Socrates, on the other hand, was poised to discover the essential nature of Knowledge, Justice, Beauty, Goodness and the traits of a good character, such as courage, in man. Here the focus is on various experiences of life of the measurer. Nietzsche, (1997) was more adamant: "And lost be the day to us in which a measure hath not been dance" and "... dance thy measure over every Here and There and Yonder". The evaluation of risk, according to Slovic, (2012) depends on the choice of a measure which represent the entwinement of the risk concept into the measure (In: Kahneman, 2012). Goethe's well known words gave it a poetic dimension: "Behold the wonder, awakes the song, with pure and heavenly measure". Prigogine and Stengers, (1984) refer the bigger context: "The world was made to his measure" and "Nature speaks with a thousand voices..."

#### *Man as the Measure*

The conscience of civilization rest upon the responsibility of the measurers to make balanced and objected judgments. Methods of measurement define who we are and what we value. As personal risk and responsibility, philosophical conscience is the courageous adventure of culture to vindicate the meaning of existence (Mueller, 1936). Humans evolved and survived by using a variety of integrated measures in their awareness, accountability and decision-making, to assist them to decode reality, muddle through the uncertainties and confront the dangers that they faced. Each of us has his own "measure" of conceptualizing reality and phenomena whether it is beauty, uncertainty, risk, value, etc....only the "currency" and representation is different. The relation of man's knowledge and his

reality represents many different levels of processes. All of them in a space/time orientation and interconnected with other human consciousness processes. The mind continuously modifies itself to every potential that is unfolding by using measures.

#### *The feeling of what happens*

In order to understand how man's brain represents the object or phenomena to behold, it was necessary to rely on how Damasio, (2000) described consciousness. It is the consciousness of the feeling, experiencing the self, the feeling very essence of oneself. "You are the music while the music lasts". In Protagoras metaphor, you are the measure. Mueller, (1936) came to a similar conclusion, "We do not live in time, but we are time". Heidegger, (2008) concurs: "Being is always the Being of an entity ...space, time, nature, etc." In this context the statement: 'Man is the risk-measure' is then fully justified. The feeling of what happens fits perfectly into the famous statement of Henri Bergson, (1911). "The flux of time is the reality itself, and the things which we study are the things that flow" and impact directly on the measures of man. Furthermore, choosing continuously is a never ending characteristic which accompanied the human at every moment of his life. Rhythmic events provide a scale on which you can measure time and change. Introducing flow into the measures of accounting would create a new impetus to make accounting a real scientific discipline. Damasio, (2000) believe that a key aspect of self-evolution concern the balance of the lived past and the anticipated future. He also identify the two abilities of human distinctiveness: - the ability to rise above the dictates of advantage and - the critical detection of discords that leads to a search for truth and a desire to build norms and ideals for behaviour and for the analysis of facts which permit the truly human function, the conscience. You rise beyond the level of knowing, renewed again and again. Human mind is constantly being separated between the measure part that represents the known and the measure part that represents the knower. To design measures with conscience can make a vital contribution towards reducing inequalities.

#### *Research methodology*

A critical and trans-disciplinary philosophy of science research approach was undertaken to relate accountability, decision-making and ethics to understand these measures and also to construct a conceptual model to unify all the dimensions and ways in which humans perceive reality. In order to facilitate the scepticisms surrounding measures it was necessary to transcend my thinking to insights from physics, philosophy, evolution and psychology to incorporate and reconcile all the elements into the conceptual model. The particular measures in accounting and finance that were critically considered are the income measure, the value-measure and the risk measure in decision-making. Research (Gouws, 1996; Lehman, 1992 and Tinker, 1985) stressed the fact that accounting's task is to equalize and not to be the architects of unequal exchanges. Although principles of Ecology (Capra, 2003) state inter alia, that no single variable (or measure) should be maximized and that all variables fluctuate around optimal values. Accounting and capitalism stick to only one measure. Here, the absence of measures is obvious. It was also considered relevant to take note of the philosophy of Cotrugli who set out ethical principles and also the first double entry bookkeeping manual in 1458.

#### *In conclusion*

A visual diagram of the model (not included in the abstract) show the variables and phenomena used in the conceptual model which culminates in the pinnacle of Man-the-Measure's consciousness: his conscience. Several new ideas to revolutionise accounting and finance in order to shape corporate responsibilities and attend to the inequality problem, are given.

#### **Keywords**

Measures, inequality, accountability, decision-making, ethics

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## **Correspondent Banking (CB) as an Opportunity of Distribution Channel in a Shrinking Market**

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### **Abstract**

This paper discusses the correspondent banking (CB) in Brazil as a branchless distribution channel. CB was created to serve low income class but to the extent of its development is encompassing other higher segments. It aims to understand the reasons CB appeared and echoed upon the strategy of financial products distribution. The bank market in Brazil is concentrated in five major banks (Banco Itaú, Banco Bradesco, Banco do Brasil, Banco Santander and Caixa Econômica Federal), accounting for over 80% of the domestic market, therefore this research studies their strategies toward CB. The data was collected from secondary data and interviews with their managers as well as through the mystery shopper technique. This operation transformed the bank distribution strategy and seems to have potential to grow and explore. There are some reasons for that: convenience, easy to replicate; low cost; and broad coverage possibilities.

### **Keywords**

Correspondent banking, distribution, shrinking markets

## 1. Introduction

Correspondent banking (CB) is an important service innate to supply low pyramid segment that recently has gain eminence as result of its expressive expansion to other segments. It provides banking services to markets other than their traditionally medium and high-end class customers. Brazilian Central Bank (2012) defines correspondent banking as “a legal entity or company that amongst its activities perform as an intermediary between banks or financial institutions authorized to operate by the Central Bank and their final clients”. An intermediary can be retailers which the purpose of servicing face-to-face without branches, and therefore expand sales.

A survey conducted by Brazilian Bank Federation, FEBRABAN (Mompean, 2014) registered a yearly increase of 16% in transactions carried out by banks, between 2008 and 2012. However, in the same period the share of branch channel went down from 18% to 11%. ATM transactions experienced the same effect, going down from 33% to 26% among the total transactions. The traditional bank branch channels are gradually being replaced by the internet, which as of 2010, became the primary channel for banking transactions (Achrol & Kotler, 1999; Black, Lockett, Ennew, Winklhofer & McKechnie, 2002). In 2012, for the first time, the total number of online transactions (internet banking and mobile banking) exceeded physical media (branches, telephone and ATMs) in Brazil. However, only checking account transactions were affected by electronic channels; services like loans, the acquisition of insurance and investments virtually had no growth, and the branch network dominates almost 80% of the banks’ sales to individuals. The survey also shows the growth of CB (Figure 1) representing 4% of the total transactions carried out by banks in Brazil (Mompean, 2014).

*Figure 1: Correspondent banks number, share and channel growth*

Number of correspondent banking in Brazil (BACEN, 2014)	377,701
Share in the total number of transactions made (FEBRABAN, 2014)	4%
Channel growth between 2008 and 2012 (FEBRABAN, 2014)	78%

Source: Prepared by the author based on Brazilian Central Bank (BACEN, 2014) and FEBRABAN (2014)

Brazil is a peculiar case regarding the supply of financial products through CB. Large and small retailers offer credit for their products buyers since the mid-1990s (Pahalad, 2010), initially by themselves, later over banking partnerships which became correspondents. Retailers of all sectors, ranging from car dealers and domestic appliances resellers to supermarkets and clothing trade provide credit to their customers. The main international literature approaches branchless banking together with the adoption of internet banking, ATMs, and mobile banking, and more recently CB is a service to add to this list.

Given the importance and importance of CB in the economic scenario this paper aims to understand the CB phenomenon in Brazil and its impacts on the banking financial services distribution. So, it will be possible to understand which services are more suitable to distribute by CB.

## 2. Brazilian Banking Market

The financial system has undergone profound transformations in the past two decades. In 1994, with the stabilization of the Brazilian economy, banks lost their main economic activity, since the customers’ floating<sup>1</sup> had a significant reduction in profit margins due to a slowdown in the inflation rate. Later, the sector experienced a wave of mergers and acquisitions, consolidating itself in just a few large banks. The 2008 crisis led to a re-consolidation of the sector resulting on 83% of deposits concentrated in just five institutions: Itaú, Banco do Brasil, Bradesco, Santander and Caixa Econômica Federal (BACEN, 2014). Among the five largest banks, only one has foreign control (Santander), two are state-owned

<sup>1</sup> Floating: Money left in customers’ checking accounts, used by banks without bearing interest.

(Banco do Brasil and Caixa Econômica Federal) and two have domestic capital (Itaú and Bradesco). Figure 2 exhibits information about the 20 largest banks in Brazil.

Figure 2: The 20 largest banks in Brazil

Position	Institution	Loans and Leasing	Total Deposits	Net Profits	Nº of Branches
1 <sup>o</sup>	BB	645.028.781	469.680.089	5.833.139	5.524
2 <sup>o</sup>	CAIXA ECONOMICA FEDERAL	597.108.812	419.338.756	3.702.318	3.391
3 <sup>o</sup>	ITAU	390.476.483	310.831.489	10.311.204	3.885
4 <sup>o</sup>	BRADESCO	313.669.882	212.507.911	7.880.304	4.665
5 <sup>o</sup>	SANTANDER	207.049.291	143.887.187	1.218.969	2.640
6 <sup>o</sup>	HSBC	56.241.941	57.727.489	-532.785	854
7 <sup>o</sup>	VOTORANTIM	51.114.951	3.810.548	210.010	14
8 <sup>o</sup>	SAFRA	46.547.940	9.781.404	830.183	108
9 <sup>o</sup>	BANRISUL	28.678.567	34.302.822	463.545	528
10 <sup>o</sup>	BTG PACTUAL	16.986.101	21.280.905	1.561.384	9
11 <sup>o</sup>	PAN	16.249.277	11.576.354	106.107	2
12 <sup>o</sup>	BCO COOPERATIVO SICREDI	13.272.866	11.731.452	52.893	5
13 <sup>o</sup>	BCO DO NORDESTE DO BRASIL	12.601.812	11.925.427	421.338	292
14 <sup>o</sup>	CITIBANK	11.467.018	14.278.844	17.268	127
15 <sup>o</sup>	ABC-BRASIL	10.391.982	4.794.565	160.173	5
16 <sup>o</sup>	BCO DAYCOVAL S.A	10.087.783	3.929.328	145.516	39
17 <sup>o</sup>	BCO RABOBANK INTL BRASIL S.A.	9.600.702	163.654	108.881	17
18 <sup>o</sup>	BMG	9.475.696	5.436.466	145.662	20
19 <sup>o</sup>	BRB	9.082.865	8.513.539	45.662	115
20 <sup>o</sup>	MERCANTIL DO BRASIL	8.486.676	8.355.766	-75.129	189
Total	96 institutions	2.558.941.760	1.858.101.916	33.289.489	23.097

Note: Only multiple banks with commercial portfolios (tier-1 banks)

Source: BACEN (2014)

By the 1950 some retail stores began to offer direct consumer credit and at present all retail sectors, including consumer goods and durable goods, provide direct consumer credit (Pitta, Guesalaga, & Marshall, 2008). The five largest Brazilian banks, in turn, hold in their possession more than 85% of the national savings and the investment market. This characteristic created an opportunity for banks to offer loans and sell financial products from their conglomerates in alliances and partnerships with retailers. These alliances turned retailers into correspondent banks, and by 2012, the Central Bank regulated the market.

Initially, the focus of CB was on social inclusion, through microcredit (Krasnikov, Jayachandran & Kumar, 2009; Pickens, Perteous & Rotman, 2009). The Brazil's largest retail chain in Brazil, offering electronics, appliances, and furniture (Casas Bahia) emerged as one of the trailblazers of this operation, raising funds from investment banks and suppliers and loaning it directly to customers to finance purchases of furniture and domestic appliances. The loans were secured by the goods (Prahalad, 2010). This retail chain turned in a benchmark to others retailers, from the most different specialties, like clothing stores, vehicles resellers, and others. Later, with the growth of the retailers' operation, the major Brazilian banks sewn partnerships with the retailers for the supply of credit and other financial products, as Stah, Matzler, and Hinterhuber (2003) mentioned in their study, that alliances could create value for banks and retails, increasing the medium ticket and revenues.

Currently, all these retailers sell not only products by credit, but also all sorts of financial product, such as checking accounts, insurance, investments and, in some cases, even withdrawals, payments and deposits (Ivatury & Mas, 2009).

According to the Brazilian Central Bank, there were over 377,000 correspondent banks in Brazil in 2014 (Figure 1). Of those, nearly 200,000 supplied credit cards, while 150,000 took bill payments. However, the supply of credit is the stand out service, as shown by Figure 3.

Figure 3: Correspondent banks points of service by type of service provided

	Opening Checking Account	Account Handling	Payment of Bills	Receiving Checks	Credit Offer	Receiving Overdue Bills	Credit Card
Total	73.573	97.846	150.660	30.902	277.644	11.991	200.673

Source: BACEN (2014)

Itaú stands out as the bank with the highest number of CB in Brazil (Figure 4), with 74.000 points of sales and the focus being on credit and card offer. The second largest bank is Bradesco, with almost 60.000 spots. Bradesco also owns the largest number of correspondent banks able to open checking account and take bill payments. The two are the largest private banks in Brazil.

Figure 4: Correspondent banking number by financial institution

Institution	Number of Banking Correspondent	Opening Checking Account	Account Handling	Payment of Bills	Receiving Checks	Credit Offer	Receiving Overdue Bills	Credit Card
Itaú	74.356	0	218	5.292	473	15.183	0	13.370
Bradesco	59.502	27.180	38.092	44.963	2	31.171	0	30.725
Banco do Brasil	40.148	8.072	29.663	28.873	1	8.070	0	6.923
Caixa Economica Federal	20.428	23.253	23.253	28.096	28.556	28.318	0	28.320
Banco Pan	22.670	0	0	0	0	12.853	0	10.047
Aymore (Grupo Santander)	21.585	0	0	0	1	16.175	0	2
BV Financeira	20.030	0	0	0	0	20.029	0	20.030
HSBC	15.429	0	0	0	0	14.939	0	1.479

Note: considering all companies within the group.

Source: Central Bank (2014), adapted by the author

The following section will highlight the main international literature of distribution channels; financial products; consumer behavior upon branchless banking to better understand the CB context.

### 3. Literature Review

#### 3.1. Brazilian banking distribution channels

Distribution channels are built to facilitate and reduce the costs of companies' trade with customers. Cost reduction is the first objective when establishing intermediaries, namely, sales channels (Rosembloom, 2011). By promoting the relationship with retailers or wholesalers, the number of contacts an industry needs to establish to get to the customer is reduced, in addition to a gain in logistics (Coughlan, Anderson, Stern & El-Ansary, 2010; Rosembloom, 2011). A second point is taking advantage of the channel's expertise, which helps to increase sales of a given product as a result of the direct contact with the target customer, and of the existing commercial synergy with other products sold by the retailers (Rosembloom, 2011; Seiders, Voss, Godfrey & Grewal, 2007; Thornton & White, 2001).

The distribution of financial products in Brazil has always been guided by the channel's vertical integration, with full control of the distribution channel and a point-of-sale network of its own (Soteriou & Starvrinides, 2013). This option turned banks into major employers of skilled labor, with tens of thousands of employees, most of them spread across commercial positions in the branch network (Eskelinen & Kuosmanen, 2013). That means high costs to sell products, and loss of commercial synergies that retailers can offer when selling other products (Jarrar & Neely, 2002; Hartline & Ferrel, 1996).

For retailers, making credit more easily available at the time of consumption can bring convenience (Darian & Cohen, 2005; Rogers, 2005), because customers are not required to contact the bank branch, which is normally open at restricted times (Kimbal & Gregor, 1995). In Brazil, this offer is not limited to cars and real estate, but also to consumer goods and durables, because many retailers issue credit cards and set up instalment plans in partnership with financial institutions (Pralhad, 2006). The

banking sector dedicated to channel management goes beyond analyzing these questions when deciding which indirect distribution channel to use, but also take advantage of the retailers' own needs (Mckay & Pickens, 2010). Banks in this case are defined as facilitators of distribution channels. They are not members of the channel established between manufacturer and end consumer (Rosembloom, 2011; Lovelock & Wright, 2002; Bateson & Hoffman, 1999).

### **3.2. Financial products and their traditional distribution channels**

Granting loans is a relevant product in the banks' profitability. Direct-to-consumer loans have low default rates, representing one of the focuses of the sector's activity in Brazil (Paradi, Rouatt & Zhu, 2011). In addition, for retailers the direct consumer credit is a strategy to attract customers (Berman & Evens, 1995). This sort of loan is usually a long-term one, allowing a long relationship between bank and customer, especially non-account holders. In addition to this gain, direct consumer credit by retailers is usually accompanied by insurance, which can also be cross sold with the granting of the loan, and therefore increasing the customer lifetime value (CLV) (Stah *et al.*, 2003).

With the development of computer and telecommunications technology, banks began working with a multichannel operation. However, some loans, especially those that require collateral security of real estate and vehicles, for instance, require human face-to-face service, and still cannot be done remotely (Achrol & Kotler, 1999; Meuter, 2000; Kesharwani, Singh & Bisht, 2012; Yavas & Babakus, 2010) such as a vehicle agency, a consumer electronics store, a real estate agency, or even the human resources department of a company (Gruber, 2011) what made CB very useful for the business.

### **3.3. Consumer behavior in branchless banking**

In services where inseparability and heterogeneity are variables that need to be managed by the provider, managing the sales channel can ensure standardization and quality of the service provided (Bateson & Hoffman, 2010). Direct marketing channel is recommended for complex services that require a high level of knowledge and expertise (Rogers, 2005; Beetles & Harris, 2010). Banks in Brazil have a multiple role, that is, they sell many kinds of financial products, which makes it difficult for the account manager to have extensive knowledge of everything that the bank offers for sale, thus the expertise expected by the client is compromised (Gruber, 2011; Rosembloom, 2011).

The face-to-face service of financial institutions has been expanded beyond the banks' branch network. It is currently possible to take out loans with financial institutions at various places, such as vehicle stores, real estate agencies and supermarkets, and there are correspondent banks installed in grocery stores and in general stores. Also, partnerships among retail channels, such as the network of lottery agencies and the post offices, have been established (Dias & Mckee, 2010). This causes branchless banks in Brazil to go beyond remote channels, such as internet banking and ATMs. Customers in Brazil can negotiate with and be served by a retailer, which is a correspondent bank (Ivatury & Mass, 2008).

Some customers resist remote channels and ATMs offered by financial institutions for many reasons and some are worthwhile to be mentioned (Patsiotis, Hughes & Webber, 2012). This kind of customer belong predominantly to lower social classes, with less education (Yousafzai & Yani-de-Soriano, 2012) and need to go to the branch more frequently once they don't have a bank account or a large sum of cash money, therefore, they require a closer bank service. Banks contradictorily have placed expensive branches in more high-end areas (Teller and Elms, 2010) to fulfil profitable customers who make use of internet banking and go to the branches occasionally. CB in this way is an alternative to lower class clients access the bank services (Pickens, Porteous & Rotman, 2009). The offer of financial products, such as loans, insurance and new investments on the internet or at the ATMs would not be effective

for this audience. They require more counselling for these operations, demanding personal service (Kumar & Venkatesen, 2005).

#### 4. Research Design

The main Brazilian banks (Itaú, Bradesco, Banco do Brasil, Santander and Caixa Econômica) were selected for this paper since they represent more than 80% of the total market, as presented by Figure 1 (FEBRABAN, 2014). The data was collected from more than one source, in (Risjord, Moloney & Dunbar, 2002; Flick, 1998) using four investigative techniques (i) In-depth interviews with bank executives; (ii) Direct observation through the mystery shopper technique; (iii) Reports from banks, in particular from the institutional relations area and secondary data from the press and Brazilian research institutes, such as Data Popular and Institute for Applied Economic Research (IPEA); (iv) Regulatory and self-regulatory agencies, such as the Central Bank of Brazil, FEBRABAN (Brazilian Federation of Banks) and ANBIMA (National Association of Investment Banks and Open Market). The data collection was taken during the second semester of 2015.

#### 5. Analysis and Managerial Implications

Figure 5 summarizes of the cases reviewed and shows two models of CB. The first focuses more on operational banking services, or simple transactions like payments, withdrawals, deposits and transfers, among others, and occasionally opening checking accounts. The other focuses on financial products, such as, consumer credit facilities, insurance, credit cards and banks special products.

The goal for all banks when setting up partnerships with service correspondent banks is an alternative for customers who have not migrated to electronic channels, as internet banking and ATMs. Especially to those residents in rural areas and in the suburbs of major cities, as proposed by Pickens, Porteous and Rotman (2012) and Prahalad (2010) who don't find bank branches nearby. Among the population over 18 years old, 39.5% have no bank accounts in Brazil (Schiavinatto & Schmidt, 2011). Data Popular Institute (Brazilian research company), in a survey commissioned by FEBRABAN, pointed out that the main reason for this is that bank branches are too far away (Gasparian, 2013).

Transactions made through CB have a lower cost, as they do not require the security apparatus of a branch bank; they work with less qualified work force; and allow a reduction in handling costs of documents and cash. Furthermore, brings benefits of face-to-face service, obtaining commercial synergies with the retail specialization, and opening a new channel for products that are not efficiently shopped through others branchless banking channels (Venkatesan, Kumar & Ravishanker, 2007). This fact increases the efficiency of the bank operation if compared with traditional branches, creating an option for the use of remote and self-service servicing, such as internet banking that some segments resist to adopt (Yousafzai & Yani-de-Soriano, 2012).

On the other side there are restrictions as others indirect channels, like less control and the need of combining the bank operation to the retails system (Rosembloon, 2011; Coughlan, 2010).

CBs are focused primarily on selling banking products, notably direct consumer credit and items that are sold for convenience. For instance, (a) taking advantage of the opportunity to provide loans at the time consumers shop for the goods; (b) increasing the intention of taking out loans, and the amount of the loans, and (c) adding in many cases the security interest (Kimball & Gregor, 1995; Thornton & White, 2001).

Figure 5: Summary of correspondent banking operations

Bank	Transaction	Main Focus
Banco do Brasil	Banco Postal (Postal Bank)	Partnership with the Post Office to offer banking services, checking account opening and account handling.
	Rede BB Mais (BB Net Plus)	Partnership with small retailers to offer banking services, checking account opening and account handling.
	Credit card offering	Offer of credit cards with reward program (main partner: Posto BR)
Banco Bradesco	Bradesco Expresso (Express Bradesco)	Partnership with small retailers to offer banking services, checking account opening and account handling.
	Finasa, Bradesco Financiamentos (Financing Bradesco)	Joint venture with retailers to offer direct consumer credit (main partner: Casas Bahia)
Caixa Econômica Federal	Lotéricas (Lottery Agencies)	Partnership with Lottery network to offer banking services, checking account opening and account handling.
	Caixa Aqui (Caixa Econômica Federal here)	Partnership with small retailers to offer banking services, checking account opening and account handling. There is also a partnership with real estate agencies to provide mortgages
Santander	Real estate agencies	Partnership with construction companies and real estate agencies to offer mortgages.
	Pague Perto (Pay nearby)	Partnership with small retailers to offer banking services, checking account opening and account handling.
Banco Itaú	Domestic Appliances	Joint venture or partnership with retailers to offer direct consumer credit.
	Private label credit cards	Joint venture or partnership with retailers (especially with supermarkets) to provide credit cards and direct consumer credit to consumers.
	Dealer	Partnership with car dealers to offer financing.

Source: Prepared by the author

The most prominent examples of retailers that operate as correspondents' banks are:

1. Supermarkets – they are efficient on selling credit cards. It is worth emphasizing the performance of Banco Itaú, partner of Pão de Açúcar supermarket, and Walmart, through the Hipercard operation; as well as Bradesco with Carrefour.
2. Appliances Stores – they grant direct consumer credit to a considerable number of people. The transactions are secured by the goods sold. The loan is often paid by installment payment booklets directly in the store, as a way to encourage customers to come back to the establishment. In this operation, the following stand out: (a) Itaú, which has joint ventures with important retailers as, Ponto Frio, Lojas Colombo, Extra Eletro and Magazine Luíza; (b) HSBC and Ricardo Eletro Insinuante; and (c) Bradesco and Casas Bahia considered the largest joint-venture set up to grant loans in Brazil.
3. Real Estate Agencies – the mortgages are important, but by the very nature of the transaction, i.e. more complex and compromising a significant amount of money, require insurance and checking account. The program *Caixa Mais Real Estate Agencies*, of Caixa Econômica, and the Santander operation stand out in this operation which has been proved as very convenient for the participants.
4. Vehicles Resellers – they sale vehicles by financing and leasing them. Additionally, they are efficient at offering car insurance and extended warranty. The highlight in this operation is Itaú.
5. Clothing and accessories stores – they offer credit cards as a mechanism to sell direct consumer credit. As they have no security interest, the card is efficient due to the credit protection tools provided by the product. The highlights are C&A and Banco Bradesco.
6. Gas stations – they are not interested in offering consumer credit, but in issuing cards with reward programs. The strategy is to retain customers through these loyalty programs offered by credit cards. The partnership between Posto BR and Banco do Brasil, Ipiranga and Itaú, and Shell and Santander stand out.

Despite the heterogeneity in the retailers' goals presented in Figure 5, the financial institutions have one central goal: expanding the channels for the sale of financial products, particularly loans secured by assets and credit cards. These partnerships and joint ventures intensify the efficiency of intermediation, increasing interest rates based on the convenience offered to customers and reducing credit losses through security interest, making the banks more consumer oriented, overcoming this central barrier pointed by Lähteenmäki and Nätti (2013). They also boost profitability by increasing the amount of credit offered. Furthermore, the operating costs are lower than those paid by the work of an account manager in a bank branch, thanks to the channel synergy, whereby the same seller on the same physical space of the store is able to offer retailing and financial products. This condition creates commercial synergy among the joint ventures and partnerships, which is pivotal to success of these alliances (Amici, Fiordelisi, Masala, Ricci & Sist, 2013; Kogut, 1988).

## 6. Final Remarks

The operation of CB accomplished a significant market under the burgeoning of low income class in Brazil during the last ten years approximately replacing partially the loss with the shrinking of medium class market caused by the economic and political crisis in Brazil. If for on one hand, service CB is able to serve the low-income market in Brazil; on the other hand, CB of products made possible a growth on direct consumer credit.

Direct consumer credit via CB presents some opportunities:

- a) Easier to take out, given the fact that customers interact only with retailers, as opposed to when customers interact with retailers and the bank.
- b) Higher average ticket in loans, given that retailers seek to offer products close to the credit limit approved for the customer.
- c) Better security, by the alienation of the asset that is being purchased and from the point of view of the customer, the relationship is with the retailer, not the bank.
- d) Higher spread and profits once customers are less critical of the interest rate charged, taking into account especially how much each installment will be not the total sum.
- e) Tie-in with other products, particularly insurance.
- f) Credit offer for non-account holders.

CBs were incorporated as a banking distribution channel, given the limitations that the electronic channels and the branch network had to sell secured products and serve low-income customers. Service via branch network is currently focused on managing checking accounts, especially for middle and high-income customers, and the sale of banks' convenience products, like overdraft, credit and savings. Banking services to such customers are especially made by internet banking. On the other hand, less privileged customers have their relationship centered on the CB services, which play the role of a bank branch for them.

Hence, CB contributes to banks in two main situations. First, serving unbanked customers, who, in their majority, reside far away from the banks' branch network and those who have barriers in using remote channels. Second, extends the offer of financial products that are more difficult to be sold or implemented in the branch network so CB expands the market by commercial and distribution synergies. Convenience is also an important benefit to the customers.

CB is still a developing phenomenon, being practiced mostly by the largest Brazilian banks and not so much in small and medium-sized banks. At its early stages and with further developments in the future there are a lot to explore and research on this subject. There can be similar operations in other countries, however regulatory aspects of the banking sector can hinder or even prevent the replication of similar models likewise those related to culture and legal aspects.

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## **Detection of Low Part-Time Arrangements Rate in the Czech Republic – Moravian-Silesian Region**

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### **Abstract**

The paper deals with the issues of part-time work (arrangements) of employees in selected companies (facilities) in national economy. The aim of the paper is description of partial results based on the prime survey. To match the aim of the paper the quality survey was provided by interviewing the managers of selected facilities of the Czech Republic, in Moravian-Silesian region. By the survey the characteristics of the part-time work were detected: the share of part-time and structure of part-time employees, what employees use part-time arrangement and what are their reasons to use it. Furthermore, the survey was focused on the process of approving part-time requests (including criteria which influence the decision about part-time work), possibly, after the passing the reasons for part-time if full-time work is possible. Survey will continue with recognition of other important consequences important for employers' effective decision about personal and financial benefits of part-time work.

### **Keywords**

Part-time jobs, flexible work, Moravian-Silesian Region, hiring of employees

## 1. Introduction

The issue of part-time jobs (PT) is not elaborated in scientific works. The authors are usually concerned with more general trends. They mainly apply one's mind to practices in employing people, about basic aspects of employment relations, personnel policies, wages, but the authors also write and discuss the latest laws and regulations.

Legal provisions for the category of part time workers are particularly important because they appoint for them the same working conditions as full-time workers, including remuneration, which is proportional to the amount (extent) of their working time.

The issue of part-time work falls within the flexible working arrangements, which include a variety of forms. Already in 2004 the British Industrial Relations Services introduced examples of 15 forms of flexible working arrangements (IDS, 2004). The authors of article tried to identify the problems of part-time employment in the Czech Republic – Moravian-Silesian region through primary research, which was realized in 2016. The partial results are presented in this paper. This article aims to describe the partial results of the findings. Total results of primary research will be included in the upcoming monograph.

## 2. Problems of Part-Time Work and Their Reflection in Working Papers

In connection with world development and globalization trends the basic economical activity - work is changing. Flexibility is more important in the world. Heterogeneity of labor market is spreading in the area of employment contract, organization of work and working hours. It involves transformation from traditional and relatively closed working systems with rigid hierarchical organizational structures to opened, flexible, decentralized systems (Kadeřábková, 2004).

The approach to employment is changing as well. Today, more often than earlier, employees change their occupations, even professions. Employees working in the same company for whole life have been involved as rigid staff, resistant to except new challenge and spread their perspectives in other companies. They are called inflexible (Svobodová, 2003).

Atypical work arrangements obtain significant position in current world. Part-time work, compressed working week, agency employment, home office etc. are more important in many areas and branches. Flexible work arrangements are shown in table no. 1. These forms are not used much In the Czech Republic. Some companies use flexible working hours, but part-time or work from home allows exceptionally.

*Table 1: Division of flexible working arrangements*

Flexible arrangements from the point of view of length and arrangement of working time.	Overtime work, shift work, work in unsocial working hours, <b>part-time</b> work, flexible working time,
Flexible arrangements from the point of view of type of contractual relationship	Temporary work, self employment, agency employment,
Spatially flexible jobs	Home office, teleworking

Source: Chovanec & Matyášová, 2013, p. 4

Due to focus of the paper we will be interested in findings in area of part-time arrangements.

Part-time employment has been increasing in most of developed countries especially in last decades. Part-time arrangements are used particularly by women, it is the most feminized alternative form of work (McDonald, Bradley & Brown, 2009).

In the Czech Republic, especially in Moravian-Silesian region, part-time work is not used very often. Their part in total employment is about 5,3 %, when EU average is 19,6 % (Eurostat). It means substandard level. Part-time arrangement has been involved the instruments to fight against high unemployment, reaches 7,94 % in Moravian-Silesian region, one of the highest level in the Czech Republic.

In working papers the problems of part-time work can be seen from more points of view. Micro-economical point of view based on company analyzes is used very often, when authors identify the conditions, that influence part-time work and illustrate the role of part-time work as a possibility of flexible work forms (O'Reilly & Fagan, 2002). Next point of view is macro-economical, when the level of part-time utilization in different countries of the world is compared (Fagan, Norman, Smith & Gonzáles Menéndez, 2014; OECD 2010)

In this area the micro-economical point of view is examined by many authors (such as Sciarra, Davies & Freedland, 2004; Michon, 2004), but particularly economical analyzes or satisfactory analyzes with part-time working conditions are presented (such as Bardoel, Morgan & Santos, 2007; Kelliher & Andreson, 2008; Vinopal, 2011).

Less authors are specialized in human resources management and leadership in area of part-time work, in the identification of differences between full-time and part-time management and leadership, the detection of threats and opportunities, strengths and weakness, possibly creation of suitable methods of part-time employees leadership. However, some resources in this area have existed, such as Sobiah (2011) focused on utilization of part-time arrangement in hospitality sector in Great Britain. He has focused his survey on part-time employees and dealt with selected processes of management, such as recruitment and selection of employees, their adaptation and education, development, maintaining and turnover the staff with special attention to part-time employees. According to the survey 50% of respondents have considered very difficult to find suitable part-time employee, particularly when the company searches a supplemental worker in rush-hours in restaurant (lunch time, weekends). The biggest problem is to find employees to the restaurants situated in peripheries or out the cities. The transport to work is much more expensive for these employees (Sobaih, 2011) and their earning per hour less income per hour in part-time arrangement (Hirsch, 2005; Kallenberg, 2000).

Part-time work is described in working paper mainly in general level. Articles that deal with part questions of part-time work and its leadership are not many. That is why the authors of this paper have been attracted by the part and structure of part-time employees and what the reasons why they use it are. Then we have focused on problems of approving part-time requests (including criterions which influence the decision about part-time work), possibly, after the passing the reasons for part-time if full-time work is possible.

### **3. Interpretation of Survey**

The survey of part-time work was started in 2015 by questionnaire research of quantitative facts in companies in Moravian-Silesian region, the Czech Republic. It was ascertained, that 70 % facilities allow part-time arrangement, but the part of employees who work part-time is very low (about 6 % of total employment). Other important questions have come from the survey, which inspired next research. In the paper there are the findings based on deep knowledge, reasons and consequences of low rate of utilization of part-time work by employees in Czech companies.

Totally four interviews have been realized with heads (HR directors, branch managers) of various companies. The aim of qualitative research – interviews – was to bring deep view and explaining the

attitude of some employers. From the survey there were chosen those areas of part-time employment and leadership, where interesting or unexpected answers were noticed.

The interview was semi-standardized, some questions were developed and filled during the process of interviewing, but the base of the questions was left the same to compare the respondents' answers. The basic structure of questions was made by the fundamental questions (part, amount and structure of part-time employees), then questions leading to reasons of utilization of part-time arrangements, their benefits (and other flexible working arrangements), recruitment and selection of employees, establishing of work amount, working evaluation and remuneration, carrier development and education. The last set of questions, called „unfilled“ wanted to find perspectives of part-time work or to detect the relationship between full-time and part-time employees. Because the survey is very wide, the paper is only focused on fundamental questions, reasons of part-time utilization and recruitment.

The interviews have been realized during January and February 2016, in 4 facilities with characteristics are described in Table no 2.

*Table 2: Characteristics of respondents*

Name	Size of facility (numbers of employees)	Corporate property	Business activity	Part-time utilization
A	large	private ownership	engineering	yes
B	large	public ownership	healthcare	yes
C	large (interview done in a branch)	public ownership	insurance	yes
D	large	private ownership	finance	yes

Resource: own research

### 3.1. Fundamental questions

#### **What is the approximate part and structure part-time employees? What groups of employees use part-time work?**

Respondents were asked the similar question in the frame of quantitative research – questionnaire. It was found that average employment rate of part-time work is 13,62 %. The number is high because non-profit organizations and protected workshops took part in this research, where there are a lot of part-time employees. The extreme values have influenced the final result of survey. The exact indicator could be median, its value 5,31 % taken from the research is possibly the same as the statistic indicator (e.g. Eurostat), which is 5,3 % of total employment worked in part-time arrangement in the Czech Republic in 2015. Langhamrová (2013) claims, that „the Czech Republic is one of the states with the lowest proportion of part-time workers in the EU. The employment rate is undoubtedly for different age groups, and gender different, but it is possible to argue that low diversity of the labour market and the lack of part-time disqualifies not only parents, but also young and people over 50 years old. It is clear that it is not fully and effectively used the employment potential. For example, many mothers would ether stay at home or continue to maternity leave when they cannot find part-time job.“

Authors have taken these findings as the resource and assumption for the claim, that number of part-time employees is not high in companies, where the interviews were realized. It was confirmed by respondents:

**A:** „22 employees from nearly 1300.“

**B:** „I do not know it exactly, but it is about a hundred of employees from more than a thousand.“

**C:** „Because we allow par-time work to young graduates and to disabled people, the part of part-time arrangement is relatively high. Totally about 10 % of all employees.“

**D:** „In the frame of region it is about 6% employees.“

These facts have supported the general trend, in which companies in engineering, manufacturing industry or for example metallurgic industry do not use alternative forms of employment. It is particularly matter of shift work and difficult organization of workplace. The specialists in these sectors are the only exception as confirmed in the interview with respondent **A**: *„Unfortunately from 1300 employees only 1000 of them are in production in shift work, where the part-time work is not possible for primary reasons. To the amount of part-time employees are involved colleagues from Prague, who work in our branch for one or two hours...and do something special, it is a strategically reason, concerning the cooperation.“* In other facilities the working positions are not limited by arrangement. According to previous surveys (Formánková, Dudová & Vohlídalová, 2011; Kotíková, Kotrusová & Vychová, 2013; own research, 2015) healthcare, education and services (especially social) are suitable for part-time arrangement. Respondents from questioned facilities have confirmed this practice: **D**: *„It is not possible to say specifically (what groups of employees use part-time work) – it is across the whole branches network. All positions allow part-time arrangement.“* **B**: *„Part-time arrangements are used in the frame of personal union<sup>1</sup>, in administration, they are used by medical and non-medical staff.“* **C**: *„We do not have any problems to allow part-time work to any employees, except the client services staff. It is more difficult, because they have to keep official working hours, but it depends on the agreement with a branch manager.“*

### 3.2. Reasons for utilization of part-time work

#### **Can you explain the reasons, why did you decide to allow part-time work?**

In this question we tried to investigate the particular reasons of part-time work utilization. The most of respondents in the questionnaire survey have agreed with operating reasons (55,75 %). Because respondents could point more answers, the second most frequent answer was marked the accommodating approach to employees (43,90 %).

Lee (2014) also reminds, that due to demographic development and increasing compression in society on higher amount of women in company management, these reasons are going to be important motivation for part-time arrangements in the future.

The above mentioned reasons were supported in qualitative research. **A**: *„There are two levels. At first we want to contribute to work-life balance as a company, for women after maternity leave, possibly on maternity leave, the second reason is, that we appreciate their knowledge and the activities, which they do for the company effectively and meaningfully.“* **C**: *„We allow part-time particularly by family, or health reasons.“* **D**: *„We support flexible working forms, because full-time working arrangements are not enough. There is a higher demand and we want to help people to cohere their personal and family life with work.“*

In these companies the common element can be seen: they realize the current differences in approach to work, especially in case of incoming generation Y. These changes have forced the companies to think about the strategy of approach to employees and evaluate it. It is not usually easy. In the company A they detected not only positive responses with implementation of part-time work. **A**: *„It is true, that managers do not welcome part-time work, because it needs an adaptation to time, working issues, computers, working place, we do not have 100 % secure remote access, so it has brought some complications that should be overcome, but, in some projects, it has been overcome.“*

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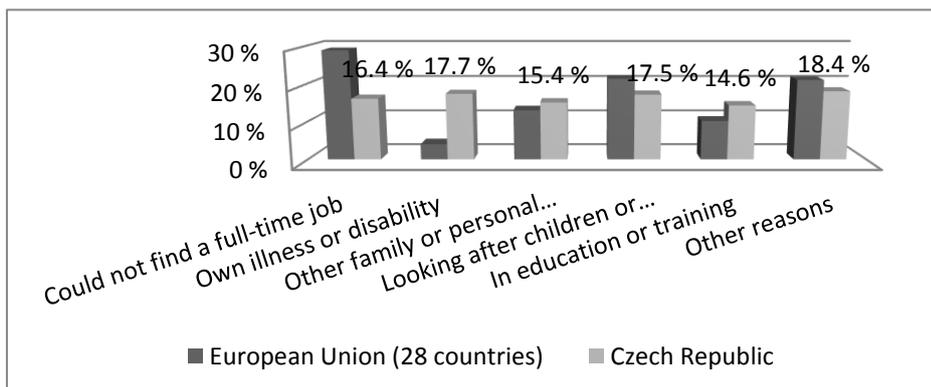
<sup>1</sup> The personal union is the term, when the management and technical positions in 2 or more similar organisations are occupied by 1 employee. The main reason is to save financial means. It is often used in organisation set up by regions, municipalities etc.

Managerial challenge and resistance of managers is one of the basic problems that employees can expect when they apply for alternative work form. By the research of The Confederation of Industry (2009) 47 % of respondents think they would have to change the leadership which is very difficult.

In the healthcare organization they think the same situation by the different way. Part-time arrangements are often used due to bad personal situation, particularly because educated, specialized medical doctors have gone abroad for better earnings, and skilled nurses shortage caused by changes in educational system. This situation is reflected in company B, where the important reason for part-time utilization is „...we have labor shortage in categories of medical doctors, general nurses and baby nurses...what is the consequence of educational system...the time of studying has extended, so finally it causes the shortage.. because they entered the universities from different secondary schools and then, when they come to practice, they are surprised by the character of work, because they do not do what they have dreamt after graduating and in comparison with other graduated people they do not reach equivalent level of income, so this is the moment when we realize the labor shortage in this category.“ The priority for the healthcare organization is to ensure the processes and this is why they use non-standard working schemes, including part-time work.

The comparison with the reasons why employees use part-time is available. There could be seen in figure no.1 the most often specific reason for part-time work is health (17,7 %). Disabled employees prefer shorter working hours. In European average (4,1 %) it is quite high number.

Figure 1: Reasons of using part-time work from the view of employers (in %)



Source: own processing according to Eurostat

The positive is, that only 16,4 % part-time employees in 2015 work part-time because they could not find full-time job (underemployment). In 2014 it was 20 %. It means the economical crisis was overcome and there are enough jobs in labor market. In comparison with EU with 29,2 %, underemployment in the Czech Republic is very low, so it is possible to say that part-time work in the Czech Republic is realized voluntarily, primary on the base of the employees' needs (Eurostat, 2016).

This is the task for managers to make up their leadership and management of part-time employees, because they are underestimated in their position in the scheme of companies and project it to different areas of human resources management, as remuneration (special offer of benefits), care of employees or recruitment.

### Recruitment

In recruitment the information (the most often reasons of part-time utilization) and knowledge of differences between part-time and full-time employees are important especially when the company is searching specialists or employee for a position, where full-time arrangement is useless. Thanks to above mentioned reasons of part-time utilization and real situation in labor market the company can

prepare the advertisement, which will attract the required employee and by this way they will decline the possibility of vacancy.

In case, that the companies want to create part-time job, they should be interested in employees' interest. The research has brought the result, despite the fact that facilities use part-time work (70 % of them), 60,23 % of them have never realized any form of research if the employees, or jobseekers are interested in part-time. From this fact it could be deemed, that companies offer part-time rarely and particularly on the base of individual application of employee. The assumption has been confirmed by interviews, when companies answered if they wait or offer part-time arrangements.

**Question: Do you offer part-time position, or wait for individual requests of employees/jobseekers?**

**A:** „We do not exactly offer them, but if somebody asks, or informs, so we try to find the way how to do it, but it is not standard.“ **B:** *Almost all part-time employees come from full-time arrangements.*“ **D:** „We do not offer them, because in case of employment we prefer full-time job, but in cooperation with students we offer a lot of trainee programs.“ Only one from interviewed companies is in position of company which searches part-time. **C:** „Basically both...it depends on the needs. It is usually written in an advertisement, or it is asked by a jobseeker, if we allow it.“

It was confirmed in interviews that employers are not very active and they do not offer part-time arrangements to jobseekers.

Another question has involved **the resources of part-time employees** was answered unequivocally, that they are internal employees who want to reduce working hours. Only company C has answered, that employees resources are not divided by the length of arrangement, but part-time jobs are sought especially by students or parents of little children (mostly by the women). **C:** „Recruitment does not differ for full-time or part-time. We use traditional forms such as web site advertisements, vacancy fairs, where we present vacancies to graduates, and our current employees' references.“

In companies, where part-time arrangements are allowed to employees who apply for part-time individually, we were interested in **criteria, which influence their decision about it.**

**A:** „...the only criterion, which has to be evaluated, is technical and qualification conditions for us. ...with the team leader I solve if it is enough to work in the defined position only part-time (in time which is required by the employee) and if it is technically possible, the access if we are able to ensure it. If we are we satisfy the applicants. For example the length of practice is not important.“ **B:** „It is decided by the individual request. We do not have any criteria, the most important thing is if it is acceptable technically, if the unit operation is not influenced by this.“ **C:** „ It can influence the operational situation at the branch where a new employee is coming to, and the reason why part-time work is requested.“ **D:** „For us the important thing is if the part-time arrangement is enough to ensure the agenda which the employee is responsible for to not endanger business of the branch. Of course, if we know the employee and we know he/she is responsible, the decision is easier.“

It can be drawn the general conclusion the facilities do not have sufficient approach of part-time utilization. Partly it is caused by insufficient support of part-time work realized by the government; partly the managements are afraid of changes that could be done in connection with alternative arrangements. On the other hand there is low level of wages, in part-time arrangements much lower, what declines their attractiveness for potential part-time employees. This combination do not force the facilities, especially in Moravian-Silesian region, any personal strategies for utilization of alternative forms of work or criteria for making decision in part-time work and they have only acted on the background of their previous experience and possibilities.

We were interested in process of agreement and its length. Answers are noted lower down:

**A:** „At first there is the most important superior’s agreement. The superior evaluates the technical and operational possibility and then it is my turn...to agree or disagree. So the process takes two days.“ **B:** „It depends on the character of the process. If we do have enough nurses, we are ready to make decision up till a week. If we decide about employees during their maternity leave, it takes about a month...for us it is better to satisfy them than to let them go.“ **C:** „It is always about the communication between a superior and employee. The superior makes the decision and put it into SAP (company’s software).“ **D:** „It is based on operational possibilities. If it is possible, there is no problem to agrees with the application till a week.“

From previous answers the conclusion can be done, that companies are not active in part-time offering, but they want to satisfy potential part-time applicants very quickly and till a week make decision about their application. To change full-time arrangement for part-time is mostly easy for companies, but our next question was about reverse situation, **when the part-time employee asks for full-time again.**

**A:** „It has never happen, that we would not allow it...but our advantage is that we are a big company and there are a lot of positions, where these employees can work, so if he/she will not have the same position, other convenient is available.“ **B:** „...if there is a vacancy (on the other department), we prolong it immediately. But if she wants to stay in the same department, she has to wait for the vacancy. We can of course prefer our part-time employee and offer her full-time vacancy and recruit a new employee for part-time position.“ **C:** „If the part-time employee wants to go back to the same branchit can be a problem, because there is a new employee to ensure the agenda (and he/she should be laid off) or it was divided between other employees.“ **D:** „Because in our company every employee has his/her own agenda and portfolio of clients, there is no problem with the change for full-time job. It takes the same time like the change for part-time.“

As mentioned, chosen companies try to satisfy their employees, but it is possible only if it is allowed by the processes and business.

#### **4. Conclusion**

The authors describe the practice of using one form of flexible working arrangements - part-time work in the Czech Republic - Moravian-Silesian Region. They proceed from not too advanced theoretical sources in the Czech Republic and in Europe, but mainly from the primary qualitative research which was realized in four companies in Moravian-Silesian Region.

The selected companies represent different types of employers where part-time work is used. This form of working arrangement allows workers to work fewer hours than normal working hours, which suits for example mothers - women workers caring for children or persons with disabilities and at the same time the employers can employ more people and they gain creative potential and talent among these employees.

Realized qualitative research convincingly demonstrated that, although part-time employment companies use, the proportion of employees who use this form of work is low (about 6%). The companies use part-time for operational reasons, also because they want to help their employees coordinate personal and working life and also because of the high demand for flexible working arrangements. The process of shortening arrangement is usually relatively short (up to 1 week), while the prolongation back to full-time depends on the operational reasons of the employer.

The article mentions only selected questions from the research. A complete analysis of the realized survey will be published in an upcoming monograph.

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## **Wealth of Nations, the Environmental Kuznets Curve, Post-Materialism and World-Wide Concern for Global Warming: A Stochastic Cusp Catastrophe Analysis**

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### **Abstract**

This research is the first to attempt to fit a stochastic cusp catastrophe model to cross-culturally estimate the influence of wealth of nations as measured by GDP, CO<sub>2</sub> emissions, objective environmental problems, post-materialistic tendencies, religiosity, and demographic factors, on concern for global warming. The results from 47 nations support Inglehart's affluence and post-materialism hypotheses. However, results seem to contradict Inglehart's objective environmental problems hypothesis. Results also confirm the existence of a global warming environmental Kuznets curve (EKC). We also found that concern for global warming is driven by religiosity and demographic factors such as age and educational level. The findings of this paper highlight the importance of using sophisticated nonlinear dynamic techniques in determining factors influencing concern for global warming across the globe.

### **Keywords**

Global warming, catastrophe theory, cusp models, post-materialism, religiosity

## 1. Introduction

Global warming and climate change have been widely recognized as international problems (Shi, Wang & Yang, 2010). Scientific evidence suggests that anthropogenic climate change is caused by different human activities (Schmidt, Ivanova & Schafer, 2013). Skamp, Boyes and Staisstrifet (2013) argued that greenhouse gas emissions are caused by such activities. Adverse consequences resulting from global warming include changes in regional climate, deforestation, melting glaciers, rising sea levels, changes in precipitation patterns, severe temperature levels and reduced crop yield, among others (Claesson & Nycander, 2013; Oskamp, 2000). Global warming has been also linked to crime rates (Rotton & Coin, 2003) and armed conflicts (Salehyan & Hendrix, 2014). Some scientists have even argued that unless global warming impact is reduced considerably, there will be an irreversible large-scale damage to our bio-physical system (Boston & Lemp, 2011).

Several authors found that public concern for global warming has risen sharply world-wide (Capstick & Pidgeon, 2014). Thus, it seems that investigating public concern for global warming is the basic prerequisite for forming an informed public opinion regarding climate change (Whitmarsh, 2009). Some authors has recently argued that reducing the impact of global warming might only be achieved through a change in virtually all aspects of human life. This includes changing the way we live, move, eat and shop (Shiva, 2008).

Most of the previous studies exploring environmental concern have focused on countries as diverse as the U.S. (Dunlap et al., 2000), Canada (Edgell & Nowell, 1989), Australia (McAllister, 1994), Norway (Olli et al., 2001), Britain (Norris, 1997), Israel (Drori & Yuchtman-Yaar, 2002), Korea (Kim, 1999), Turkey (Goksen et al., 2002), and Egypt (Mostafa, 2007). With the notable exception of Kvaloy, Finseraas, and Listhang (2012), virtually no previous studies have investigated concern for global warming cross-culturally. In this research we fill this research gap by estimating a catastrophe cusp theory model to study factors influencing concern for global warming across 47 nations. Thus, we contribute significantly to the growing literature on global warming as findings "can be important if they confirm or disconfirm a theoretical principle" (Rossiter, 2003, p. 86). More specifically, this study extends the current debate about concern for global warming in two ways: first, the study employs the largest data set so far, spanning 47 nations. This large sample, in turn, makes it possible to generalize results to other nations not included in the sample. Second, we empirically implement catastrophe cusp theory for the first time to investigate the influence of GDP, CO<sub>2</sub> emissions, objective environmental problems, post-materialistic tendencies, religiosity, and demographic factors, on concern for global warming.

Although a catastrophe usually evokes images of dramatic and sudden upsetting of the order of things, catastrophe theory has a specific mathematical meaning (Boutot, 1993). This theory is regarded as "a special topic within the broader domain of nonlinear dynamical systems (NDS) that pertains to sudden discontinuous changes of events" (Guastello, 1995, p. 3). A catastrophe occurs when a smooth and continuous variation results in a discontinuous and sudden variation of effects. Catastrophe theory was first developed by the French mathematician René Thom (1975) to study the succession of forms in nature or morphogenesis. Examples include phase transition in physics, progress of sea waves towards the shore, sudden change of attitudes and embryonic development in biology. Such discontinuities are called catastrophes because of their inherent dynamic characteristics. Due to this dynamic behavior, traditional mathematical models cannot be used to model this type of situation. Gilmore (1993) argued that there are five elements that define the presence of catastrophe: (1) bimodality, where two opposing modes exist in the outcome variable distribution (global warming alarmed versus skeptic audiences); (2) sudden jump, where an abrupt change occurs in the outcome variable (global warming concern) between the modes even with a slight change in global warming predictors such as CO<sub>2</sub> emissions or perceived relative risk; (3) inaccessibility, where an outcome value in the area between the modes is unlikely; (4) hysteresis, where a temporary change from one mode (alarmed audience) to the other (skeptical audience) cannot be accounted for by the same original values

for control factors; and (5) divergence, where "a slight change in the control factors can lead to substantial change in the outcome and deviation from the linear model" (Chen, Lin, Chen, Tang & Kitzman, 2014, p. 212).

This study is based on three theoretical paradigms: the new politics, the objective conditions, and the value-based paradigms. The new politics' paradigm advocated by Inglehart's (1977) and Inglehart and Welzel's (2005) suggests that individuals change their attention from personal and economic security issues to other more abstract ones such as environmental protection as nations become more affluent. The objective conditions' hypothesis (Inglehart, 1995) is based on the idea that environmental concern can be predicted by objective environmental problems experienced by an individual. Empirical support of this theoretical argument has been reported by several studies (Wood & Vedlitz, 2007). Finally, the value-based paradigm advocated by Schwartz (1996, 2006) suggests that basic values such as religious beliefs can affect concern for environmental issues. Empirical evidence supports, in general, this paradigm (Kvaloy, Finseraas & Listhang, 2012).

This paper is organized as follows. In the next section we review the relevant literature and develop research hypotheses. This is followed by the methodology and results sections. In the final section, we present relevant implications, limitations and directions for future research.

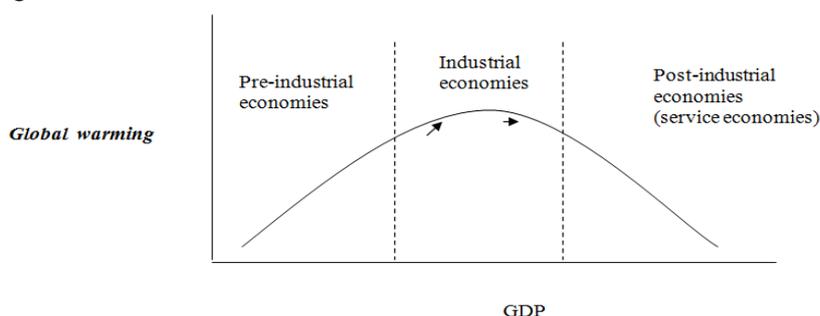
## 2. Literature Review and Hypotheses Development

According to Inglehart's paradigm, more favorable pro-environmental behaviors are expected by richer societies as compared to poorer societies. This famous hypothesis is known in the literature as the affluence or the direct effect hypothesis. In a similar vein, Franzen (2003) argued that wealthy societies are characterized by higher demand for environmental quality compared to poorer societies. Franzen (2003) also found that the higher the GDP per capita, the more the financial sacrifices a society will be willing to incur in order to protect the environment. Jorgenson (2005) found GDP is positively correlated with per capita environmental concern. Grossman and Krueger (1996) postulated that concern for the environment rises initially as GDP grows, then falls as GDP per capita continues to rise (e.g.). This phenomenon is widely known as the Environmental Kuznets Curve (EKC), describing the inverted-U-shape relationship usually observed between per-capita income and environmental degradation (Figure 1). However, it should be noted that this relationship remains debatable (Dasgupta et al., 2002; Mostafa & Natarajan, 2009). Some authors have argued that the EKC is only valid for a small subset of environmental measures (Managi, 2006). The discussion presented above suggests the following hypotheses:

**H1:** GDP is positively related to global warming concern.

**H2:** The relationship between economic growth and concern for global warming follows an inverted U-shaped EKC.

Figure 1: The environmental Kuznets curve



Several authors such as Martinez-Alier (2002), Agyman, Bullard and Evans (2003) have reported a positive link between environmental degradation and environmental concern both in wealthy and poor nations. Givens and Jorgenson (2011) suggested that environmental degradation is a major source of environmental concern. The authors argued that nations that face severe environmental problems are expected to show more pro-environmental attitudes. This "objective problems hypothesis" has found some empirical support. For example, in a study spanning 38 nations, Givens and Jorgenson (2011) found a positive link between environmental degradation and environmental concern. Running (2013) employed multi-level analysis across 43 nations and found a statistically significant positive relation between CO<sub>2</sub> emissions and concern for global warming. Similarly, Schelhas and Pfeffer (2005), Anderson et al. (2007), Harris (2006), Johnson, Brace, and Arceneau (2005), and Newig (2004) have reported a positive link between objective environmental conditions and environmental concern. Despite this overwhelming evidence, some authors argued that there may be a cleavage between local and global environmental degradation. For instance, Zhou (2013, p. 456) argued that "local water and air pollution are more directly felt than global problems such as global warming and biodiversity loss". This discussion suggests the following hypothesis:

**H3:** CO<sub>2</sub> emissions are positively related to global warming concern.

**H4:** Relative environmental risk is positively related to global warming concern.

Schultz et al. (2000) and Yuchtman-Yaar and Alkalay (2007) argued that religiosity is probably one of the least variables employed by researchers to investigate environmental concern (The empirical evidence linking religiosity to global warming is mixed. Some authors have reported a positive relationship between religious participation and environmental concern (Kanagy & Willits, 1993). However, most of the studies conducted in the U.S have reported a negative relationship between religiosity and concern for environmental degradation (White, 1967; Hayes & Marangudakis, 2000, 2001). Since we do not use U.S. data in this study, we expect to find a positive relationship between religiosity and concern for global warming. This discussion suggests the following hypothesis:

**H5:** Religiosity is expected to relate positively to global warming concern.

Inglehart (1995) argued that there is a positive link between post-materialist values and environmental concern. Inglehart's logic is based on the reasoning that once individuals attain some sort of economic security, they start to focus their attention on other salient issues such as environmental quality. This "subjective values hypothesis" postulates that pro-environmental behavior is generally higher in some countries because these countries are classified as post-materialistic. In fact, Abramson and Inglehart (1995) argued that post-materialists and materialists have essentially distinct environmental attitudes. There is overwhelming empirical support for this hypothesis. For example, Oreg and Katz-Gerro (2006) and Steger et al. (1989) reported a statistically significant positive link between post-materialism and environmental concern. Other studies reporting a positive link between post-materialism and environmental concern include Schultz and Zelezny (1999) and Gelissen (2007). This discussion suggests the following hypothesis:

**H6:** Post-materialistic orientations are positively related to global warming concern.

From a socio-demographic perspective, Age has constantly been reported to have a negative relationship with pro-environmental behaviors (Klineberg et al., 1998). Several studies have found that younger individuals tend to express pro-environmental behaviors (Marquart-Pyatt, 2008). Van Liere and Dunlap (1980) attribute this phenomenon to the "idealism of youth", which found strong empirical support (Kanagy et al., 1994). A positive relationship between education and pro-environmental behaviors has been reported in the literature (e.g. Jones & Dunlap, 1992; Van Liere & Dunlap, 1980). This may be interpreted by the fact that highly educated persons tend to be more able to understand and process environmental information and/or issues. Empirical support for a positive link between

education and pro-environmental behavior has been reported by several authors (Xiao & Dunlap, 2007; Shen & Saijo, 2008). This discussion suggests the following hypotheses:

**H7:** Age is negatively related to concern for global warming.

**H8:** educational level is positively related to concern for global warming.

### 3. Method

#### 3.1. Stochastic cusp theory

The general behavior of a dynamic deterministic system is governed by the following potential function (Barunik & Hukacka, 2015)

$$\partial y / \partial t = - [\partial V(Y; \alpha, \beta) / \partial Y] dt \quad (1)$$

where the state variable  $y(t)$  of the system is controlled by the parameters  $\alpha$  and  $\beta$ . This system is in a state of equilibrium as long as the derivative of the right-hand side of equation (1) = 0. However, a non-equilibrium state system can return to an equilibrium state as long as the function  $V(Y; \alpha, \beta)$  is minimized with respect to  $y$ . Since a small perturbation in the system takes it back to its original equilibrium state, such equilibrium points are said to be stable. While equation (1) describes the behavior of dynamic deterministic systems in general, a special case, known as the cusp potential function, is probably the most widely applied function in social, behavioral and biological sciences (Chen, Lin, Chen, Tang, & Kitzman, 2014). Using regression notation, the canonical form of the cusp catastrophe model may be written as follows (Chen & Chen, 2015)

$$V(y; \alpha, \beta) = \alpha y + 1/2 \beta y^2 - 1/4 y^4 \quad (2)$$

where  $y$  is the outcome variable and both  $\alpha$  and  $\beta$  are the independent or predictor variables. In the cusp catastrophe model terminology,  $\alpha$  is called the "normal" or "asymmetry" variable, while  $\beta$  is called the "splitting" or the "bifurcation" variable. Taking the first derivative of equation (2), the equilibrium point is obtained at

$$\alpha + \beta y - y^3 = 0 \quad (3)$$

Figure 2 shows the 3-D cusp catastrophe surface resulting from the first derivative of equation (2). From a regression perspective, the equilibrium surface of the cusp model may be regarded as a response surface in which the height of the surface predicts the  $y$  value given the values of the independent variables. However, the cusp catastrophe surface has a peculiar characteristic which for some values of the independent variables  $\alpha$  and  $\beta$  there are two possible predicted values rather than one. When the splitting/bifurcation variable  $\beta$  is zero or has a negative value (path B in the graph), the dependent variable  $y$  has only one equilibrium value, which changes in a smooth and continuous way with the normal variable  $\alpha$ . However, once the splitting/bifurcation variable  $\beta$  assumes a positive value, equation (3) can have three solutions/roots. As we move along path A from left to right, the number of equilibria for  $y$  changes from one to three as we cross the cusp set. This changes once again from three to one as we move out of the bifurcation set. The inaccessible region in the graph represents the case of an unstable equilibrium. On the other hand, if we move from right to left along path A, the dependent variable  $y$  remains on the upper part of the surface till we leave the cusp set. Once this set is left,  $y$  moves downwards rapidly to the lower part of the surface, leading to a sudden change or a "catastrophe."

Figure 2: The 3-D cusp catastrophe surface

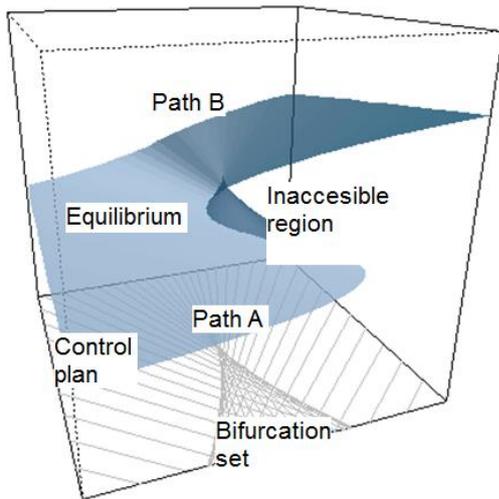


Figure 3 shows a two-dimensional plot of the control plane of the cusp catastrophe surface. From this graph, it can be seen that the cusp catastrophe surface includes two threshold lines forming one continuous changing region (cusp region). Figure 4 depicts Zeeman's (1976) theoretical cusp model conditional densities across different regions of the control plane. From this graph it can be seen that bimodal conditional density distributions occur only in the shaded cusp/bifurcation set of the control plan.

Figure 3: The 2-D cusp catastrophe/bifurcation region

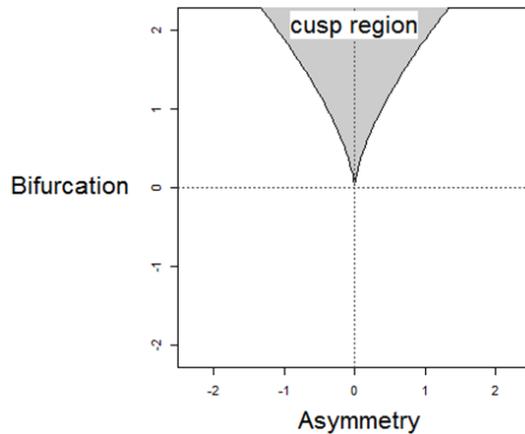
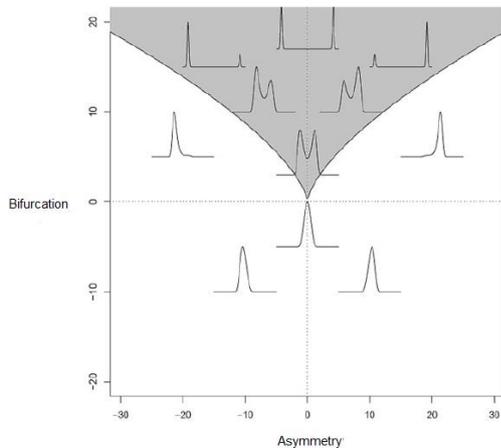


Figure 4: Zeeman's (1976) density distributions of a cusp catastrophe model at different regions of alpha (asymmetry)-beta (bifurcation) control plane



Since catastrophe theory was initially developed to study deterministic systems (Thom, 1975), its early applications in social and behavioral sciences, known to be stochastic in nature, were subject to severe criticism (e.g. Sussmann & Zahler, 1978; Zahler & Sussmann, 1977). However, Cobb and Zacks (1985) added a Wiener white noise term to equation (1), creating the following stochastic differential equation

$$dY = - [\partial V(Y; \alpha, \beta) / \partial Y] dt + dW(t) \quad (4)$$

Equation (4) transformed the deterministic catastrophe theory into a stochastic theory associated with the following probability function

$$f(y) = \psi / \sigma^2 \exp [\alpha (y - \lambda) + 1/2 \beta (y - \lambda)^2 - 1/4 (y - \lambda)^4 / \sigma^2] \quad (5)$$

This probability function describes the statistical distribution of the dynamic system at any given moment in time, where  $\psi$  is a normalizing constant whose integral is one over the entire range. Within this stochastic context, the parameter  $\beta$  determines the number of the density function's modes, while the parameter  $\alpha$  determines the direction to which the density is skewed.

Cobb and Zacks' (1985) seminal work has led to a plethora of catastrophe theory empirical applications in areas as diverse as finance (Barunik & Vosvrda, 2009; Clark, 2006), medical research (Chen, Lin, Chen, Tang, & Kitzman, 2014), biomechanics (Kume & Sato, 1999), consumer behavior (Sethi & King, 1998; Oliva, Oliver, & MacMillan, 1992), economics (Jammerneegg & Fischer, 1986), hydrology (Ghorbani, Khatibi, Sivakumar, & Cobb, 2010), conflict behavior (Yiu & Cheung, 2006; Chow, Cheung, & Yiu, 2012), product life cycle (Chang, 2000), crowd jam behavior (Xiaoping, Jiahui, & Yuan, 2010), adoption of new technologies (Lange, McDade, & Oliva, 2004), real estate market (Belej, 2013), traffic safety (Papacharalampous & Vlahogianni, 2014; Park & Abdel-Aty, 2011), mechanics (Fasoulakis, Avraam, & Raftoyiannis, 2015), education (Stamovlasis, & Tsaparlis, 2012), smoking behavior (Mazanov, & Byrne, 2008), political opinion formation (Weidlich, & Huebner, 2008), among others. To the best of our knowledge, there are no empirical applications of stochastic catastrophe theory to environmental problems, including global warming.

### 3.2. Data

The World Values Survey ([www.worldvaluessurvey.org](http://www.worldvaluessurvey.org)) database was used to collect data related to concern for global warming, demographic variables, religiosity, and post-materialistic tendencies

across 47 nations. Data from the 2005-2009 environmental module are used for this analysis. The World Values Survey provides “useful tools for comparative research, especially when statistical methods ... are employed” (Running, 2013, p. 385). Environmental and/or global warming studies have extensively used such data (e.g. Givens & Jorgenson, 2011; Running, 2013). GDP and CO<sub>2</sub> data were taken from the World Bank (WDI, 2010). Exposure to disaster data were taken from the Center for Research on the Epidemiology of Disasters database (<http://www.emdat.be/database>).

### 3.3. Measures

The fifth wave of the World Values Survey measures concern for global warming by the following question: “Please tell me how serious you consider global warming or the greenhouse effect to be for the world as a whole.” Possible set includes the following choices: “very serious,” “somewhat serious,” “not very serious,” and “not serious at all.” The original coding scheme used by the World Values Survey was reversed so that higher values reflect higher concern for global warming. Post-materialistic tendencies were measured by prompting the respondents “to select the two most important goals for their society from among the following set: 1) maintaining order in the nation; 2) giving people more say in important government decisions; 3) fighting rising prices; and 4) protecting freedom of speech”. The first and third goals were classified as materialistic, whereas the second and fourth goals were classified as post-materialistic. The number of post-materialist values was counted for each respondent. This resulted in a composite post-materialist score that can range from 0 to 2. Because of its reported validity and reliability, this scale has been employed extensively in previous research (Oreg & Katz-Gerro, 2006; Mostafa, 2013; Kimmelmeier et al., 2002). Abramson and Inglehart (1995, p. 10) argued that this scale “though simple, is valid.” Religiosity was measured by asking the respondent the following question: “how important God is in your life.” A 10-point Likert-type scale was used with 1 signifying not at all important and 10 indicating very important.

GDP per capita and CO<sub>2</sub> emissions was measured using log-transformed data obtained from the World Bank. CO<sub>2</sub> data was originally obtained from the Carbon Dioxide Information Analysis Center (CDIAC). Exposure to disaster was measured by dividing the total number of people affected by climate-related natural disasters such as extreme temperatures, floods, droughts, and storms over the period 2000-2005 (<http://www.emdat.be/database>) by the population size. We use log transformation to mitigate the influence of extreme values. This measure has been found valid and reliable measure of exposure to natural disasters in previous research (Kvaloy, Finseraas & Listhaug, 2012).

## 4. Results

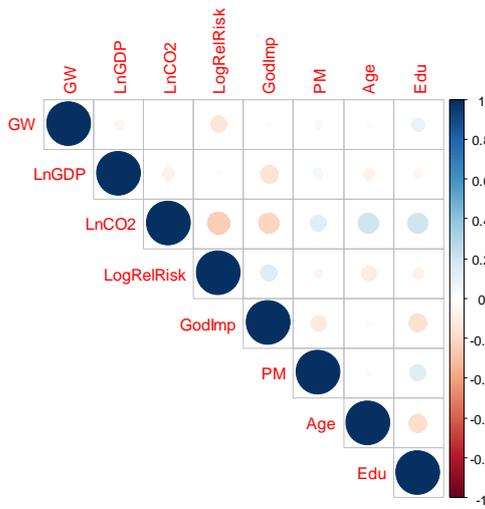
### 4.1. Descriptive statistics

Descriptive statistics of variables used in the study are shown in Table 1. We also conducted a product-moment correlation among study variables. Sekaran (2000) argued that though correlation cannot be used to prove causation, it can be used initially to predict the existence of causation. Figure 5 shows the correlations among study variables. This Figure was constructed to check the existence of a possible multicollinearity problem among study variables. From the graph it is clear that correlation coefficients among study variables are not highly correlated, suggesting the absence of multicollinearity.

Table 1: Descriptive statistics of study variables

Variable	N	Mean	SD
GW	37732	3.501	0.714
LnGDP	37732	2.838	1.899
LnCO <sub>2</sub>	37732	7.274	5.757
LogRelRisk	37732	0.047	0.084
GodImp	37732	7.808	2.886
PM	37732	1.827	0.626
Age	37732	42.200	16.394
Edu	37732	4.553	1.438

Figure 5: Product-moment correlations among study variables



## 4.2. Empirical results

Based on the new politics, the objective conditions and the value-based theoretical paradigms (Inglehart, 1977; Inglehart, 1995; Inglehart and Welzel, 2005; Schwartz, 1996, 2006), we estimated the stochastic cusp catastrophe model shown in equations 6 and 7.

$$\alpha = a_0 + a_1 \text{LnGDP} + a_2 \text{GDPSQ} + a_3 \text{LnCO}_2 + a_4 \text{LogRelRisk} + a_5 \text{GodImp} \quad (6)$$

$$\beta = b_0 + b_1 \text{PM} + b_2 \text{Age} + b_3 \text{Edu} \quad (7)$$

Although there are several software packages to fit stochastic cusp catastrophe models such as the Cuspfitt (Hartelman, 1997) and the General Multivariate Methodology for Estimating Catastrophe Models (GEMCAT) (Oliva, Desarbo, Day & Jedidi, 1987), we used the Cusp package version 2.2 (Grasman, van der Maas & Wagenmakers, 2009) in the R version 3.2 environment (R Core Team, 2015). This package was selected because of its ability to fit and compare different cusp catastrophe models based on the well-known L-BFGS-B optimization algorithm.

Empirical results are shown in Table 2. From this table we see that GDP is positively and significantly related to concern for global warming which supports hypothesis 1. This result is generally in line with previous research (e.g. Franzen, 2003). However, some studies have reported negative relation between GDP and some measures of environmental degradation such as the ecological footprint of nations (e.g. Mostafa, 2013). As the coefficient for the quadratic per capita GDP is negative and significant, this confirms the existence of EKC in concern for global warming, which supports hypothesis 2. However, it should be noted that some recent studies have found essentially no support for the EKC

(e.g. Bagliani et al., 2008). Surprisingly, both CO<sub>2</sub> emissions and relative risk were negatively and significantly related to concern for global warming. This result contradicts Inglehart's (1995) objective conditions' paradigm. However, several previous studies have also reported a negative relationships between some measures of environmental degradation and CO<sub>2</sub> emissions (e.g. Mostafa, 2013). This result does not support hypotheses 3 and 4. Religiosity was positively and significantly related to concern for global warming, which is in line with previous research (e.g. Mostafa, 2016). This result supports hypothesis 5. Post-materialistic tendencies were also positively and significantly related to concern for global warming, which supports Inglehart's (1995) post-materialism hypothesis. This result also supports hypothesis 6. As expected, age was found to be negatively and significantly related to concern for global warming, which supports hypothesis 7. This result is also in line with previous research, which generally tend to report a negative relation between age and environmental degradation (e.g. Marquart-Pyatt, 2008). Finally, educational level was positively and significantly related to concern for global warming, which confirms hypothesis 8. This result also supports previous studies reporting a positive relation between educational level and concern for the environment (e.g. Xiao & Dunlap, 2007).

Table 2: Cusp catastrophe model results

Coefficients	Estimate	SE	Lower CI	Upper CI	z-value	P >   z
a (Intercept)	0.855	0.027	0.802	0.908	31.536	< 0.001
a (LnGDP)	0.138	0.014	0.110	0.167	9.513	< 0.001
a (GDPSQ)	-0.024	0.002	-0.028	-0.019	-11.396	< 0.001
a (LnCO <sub>2</sub> )	-0.018	0.001	-0.020	-0.015	-13.850	< 0.001
a (LogRelRisk)	-1.540	0.064	-1.666	-1.413	-23.849	< 0.001
a (GodImp)	0.014	0.002	0.011	0.018	7.416	< 0.001
b (Intercept)	1.654	0.040	1.574	1.734	40.463	< 0.001
b (PM)	0.056	0.012	0.031	0.081	4.449	< 0.001
b (Age)	-0.003	0.001	-0.004	-0.002	-5.964	< 0.001
b (Edu)	0.035	0.003	0.028	0.042	10.578	< 0.001
w (Intercept)	-3.356	0.017	-3.389	-3.322	-195.443	< 0.001
w (GW)	1.265	0.004	1.256	1.274	279.206	< 0.001

Figure 6 shows the conditional densities of the stochastic cusp catastrophe model fitted. Densities in the region left of the bifurcation region are the top two panels, while the bottom two panels represent densities right of the bifurcation region. Empirical kernel density plots in this graph conform to the theoretical densities depicted in Figure 4. Figure 7 shows the classification of cases into the asymmetry-bifurcation plan. Cobb (1981, 1998) argued that for the stochastic cusp catastrophe model to fit the data well, at least 10% of the ( $\alpha_i$ ,  $\beta_i$ ) pairs should fall within the boundaries of the bifurcation region, which is clearly the case here. This plot also confirms the bimodality of the behavior under study since it has been established that data points located in the bifurcation set, the area in the triangular region, prove that the behavior is bimodal in nature (Yiu & Cheung, 2006). Although the model seems to fit the data well, to further check its robustness, we compared the stochastic cusp catastrophe model against both non-linear least square regression and logistic curve (Hartelman, van der Maas & Molenaar, 1998). The rationale of using the logistic function is based on the fact that this function has the possibility to model steep changes, thus mimicking the cusp model's sudden transitions. Table 3 shows fit statistics of the three models, which confirms the fact that the stochastic cusp catastrophe model outperforms substantially the other two models. Stewart and Peregoy (1983) suggested the use of a pseudo-R<sup>2</sup> to compare the cusp model against other fitted models. Dockery and Chiatti (1986, p. 49) argued that "a pseudo R<sup>2</sup>  $\geq$  0.4 usually taken together with the absence of an equally good linear fit" to indicate the existence of a catastrophe phenomenon. Based on our results, it seems that the stochastic cusp catastrophe model provides a very high explanatory power compared to the other two models. It should be noted that we did not use the AIC or the BIC to compare models' fit based on the fact that such models use very distinct probability density functions, and thus, very different parameter sets. This, in turn, may "violate some of the asymptotic conditions needed to derive information

criterion (IC) measures such as the Akaike information criterion (AIC) and their correction terms" (Chow, Witkiewitz, Grasman & Maisto, 2015, p. 145).

Table 3: Cusp catastrophe model diagnostics

Model	R <sup>2</sup>	Number of parameters	Log -likelihood
Linear model	0.03	10	-41162.530
Logistic model	0.02	11	-41388.110
Cusp model	0.41	12	-44757.380

Figure 6: The stochastic cusp catastrophe model conditional density plots

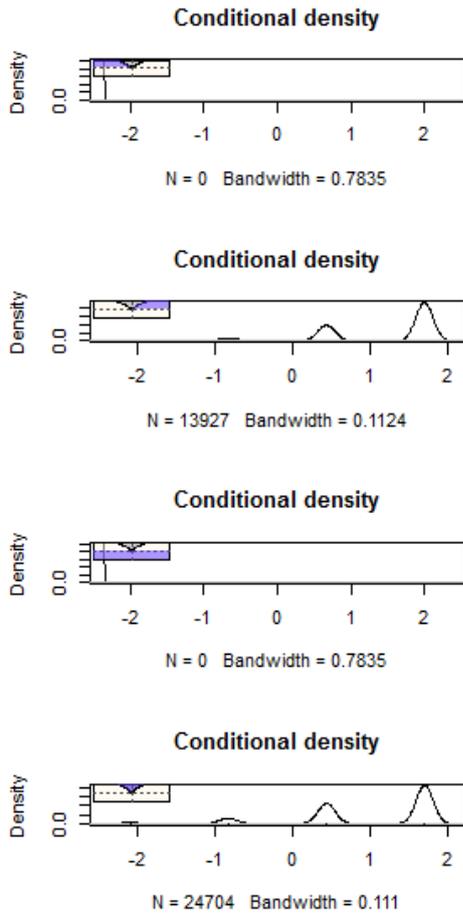


Figure 7: Stochastic cusp catastrophe model's classification of cases in the asymmetry-bifurcation plane

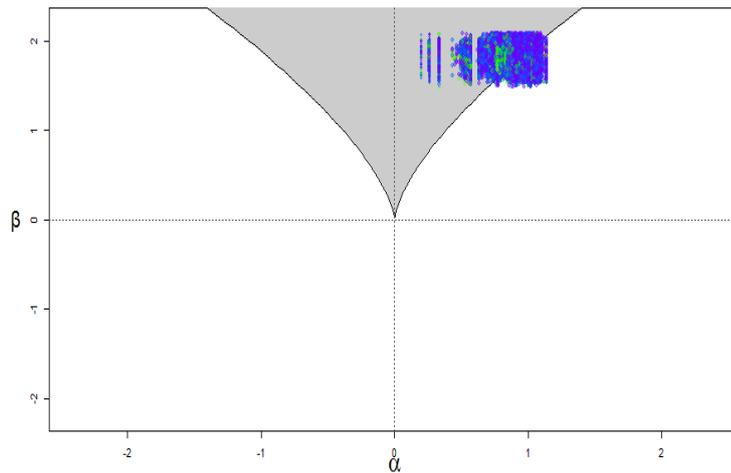


Figure 8 shows a 3-D graph representation of Figure 7. From this graph it is clear that most of the  $(\alpha_i, \beta_i)$  pairs lie within the boundaries of the bifurcation region of the stochastic cusp catastrophe model. From both the 2-D and the 3-D figures we note that each dot represents a single case. The size of the dots vary according to the bivariate density of the values of the control factor at the dot location. The dots in the cusp/bifurcation set are also plotted regardless of their location either upper or lower of the surface. The color of the dots vary with the value of the state variable. Thus, intense purple represents higher values, while intense green represents lower values. Finally, Figure 9 shows a scatter plot of model residuals versus fitted values. The delay convention technique was used to compute each fitted value post-hoc based on the mode with the smallest residual in the cusp region. In fact, the delay convention was advocated by several researchers (e.g. Cobb & Watson, 1980; Stewart & Peregoy, 1983) against the Maxwell convention, which uses the mode at which the density is highest. Rosser (2007) argues that a system under the Maxwell convention tend to jump immediately to a new equilibrium zone, while a system under the delay convention remains in the old equilibrium zone "until the last possible point before it vanishes" (p. 3260). This Figure also seems to confirm the good fit to the data.

Figure 8: Stochastic cusp catastrophe model's 3-D classification of cases in the asymmetry-bifurcation plane

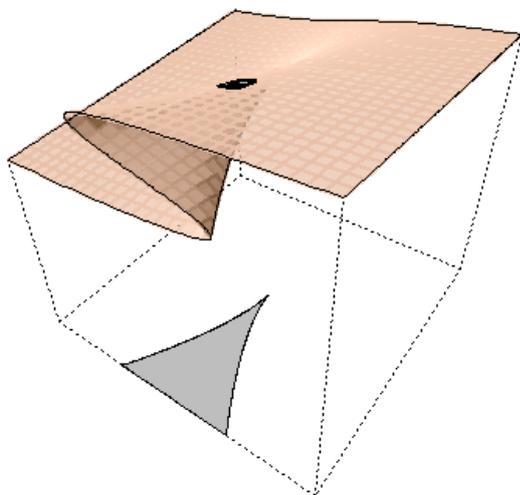
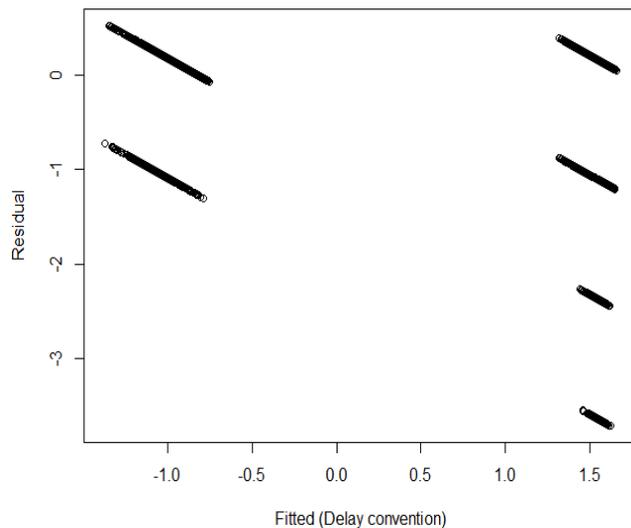


Figure 9: Stochastic cusp catastrophe model's residuals versus fitted values using the delay convention



## 5. Implications, Limitations and Future Research

Inglehart (1995) argued that wealthy and post-materialist nations tend to focus more on environmental issues. This view has generally been supported empirically (Franzen, 2003). Our findings also suggest that Inglehart's post-materialistic hypothesis is supported empirically. However, "the emergence of widespread concern for environmental quality in non-industrialized nations poses an anomaly for the theory of post-materialist values that presumably spawn environmentalism" (Dunlap & Mertig, 1997, p. 24). In studying environmental concern, some authors have argued that it is imperative to "pursue a systematic, broad ranging investigation that includes a variety of contexts (i.e., industrialized and industrializing)" (Marquart-Pyatt, 2008, p. 1332). In this study a stochastic cusp catastrophe model was used to investigate factors influencing concern for global warming across 47 developed and developing countries. Our results support Inglehart's affluence hypothesis, while they contradict the findings of several researchers who have contested the positive link between concern for the environment and economic affluence (e.g. Botetzagias & Malesiob, 2012; Escobar, 2006; Shiva & Jafri, 1998; Sarigollu, 2009). We did not find empirical support to Inglehart's objective environmental problems hypothesis. This is probably because there are nowadays several grass-root environmental movements working to alleviate disaster-ridden areas in developing nations.

Although White (1967) argued that there is a negative relationship between religiosity and concern for the environment, we did not find empirical support for this thesis. Our results may be interpreted within Kaplan's (2010) ethical values hypothesis, which suggests that religions play an important role in shaping human cultural and ethical value systems across the globe. The positive relationship we found between religiosity and global warming concern seems to suggest that religiosity fosters pro-environmental altruistic behaviors. This is in line with Tucker's (2003) thesis, which argues that religion has a unique ability to establish a moral framework that can help to protect the Earth. This implies that religious leaders/"influentials" should work with opinion leaders/"legitimizers" to promote behaviors leading to reversing the influence of global warming by highlighting the importance of biospheric values. Post-materialistic values is positively related to global warming concern across 47 nations, which seems to be an interesting finding. This result might be due to globalization, which seems to play a major role in shaping world-wide ideologies by creating what a Longhofer and Schofer (2010) call "world society" or "world polity." Thus, political leaders may exploit this tendency by shaping public opinions regarding global warming.

Like any other study, this study has a number of limitations. First, we have only focused on concern for global warming. Future research may test whether our results hold by replicating our findings across a series of other environmental concerns. Examples might include concern for air or water quality. Second, we only examined the impact of a limited number of variables on concern for global warming. It should be noted that concern for global warming is a complex combination of several ecological, social, economic, and cultural factors (Dunlap et al., 2000). Thus, it might be reasonable to argue that future research should examine the impact of several other variables on global warming concern. Examples might include sense of efficacy, locus of control, guilt, and trust. For example, Elgaaied (2012) found that guilt is linked positively to several pro-social behaviors. Thus, future research might test whether guilt may be linked to concern for global warming. Future research may also investigate whether there is a link between trust and global warming concern. In fact, Meyer and Liebe (2010) have argued that trust elicits more concern for public goods.

In this research we used stochastic cusp catastrophe theory to investigate concern for global warming across 47 nations. We have few less-developed nations in our analysis and it would be interesting to extend the analysis to include such countries. For example, in our study we have a limited number of African nations (Egypt, Mali, Morocco, Ethiopia, Ghana, South Africa, Rwanda and Zambia). This does not allow for testing Israel's (2004) remarkable finding regarding African countries' strong support for environmental protection. Finally, because of data availability, we used a cross-sectional design rather than a longitudinal one. This implies that our emphasis has been placed on observing respondents' behaviors at a specific point on time, rather than in observing changes in behavior. Thus, it seems that there is a need for much more longitudinal research to focus on observing changes in concern for global warming over time.

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## **Access to Funding By Small and Medium Enterprises: A Demand-Side Analysis in Gauteng, South Africa**

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### **Abstract**

The study used a survey design to identify the main internal characteristics of 144 SMEs in Gauteng, South Africa. With logistic regression, crucial variables in the model were identified and determined the prediction of the approval or decline of SME loan applications. The main findings of the study were that the abilities of SMEs to attract funding were influenced by internal characteristics, such as: the size of the business, age of the business, type of industry, managerial competencies of the owner/managers, and educational levels of the SME owner-managers. The availability of collateral was a key determinant in the approval or decline of a loan application. SMEs that were Value Added Tax compliant had better chances to obtain funding. The study concluded that SMEs have certain internal characteristics that relate to the ways in which they operate their businesses, and that these characteristics impact their access to funding.

### **Keywords**

Small and medium enterprises, entrepreneurs, funding

## 1. Introduction

The scarcity of capital to fund SMEs' results in what Newberry (2006, p. 4) calls the 'finance gap', as demand for funding is unmatched by support from credit suppliers. Stiglitz and Weiss (1981, p. 393) call this phenomenon 'credit rationing' and argue that it occurs when banks or credit grantors do not extend the full amount of credit demanded, even when the borrower is willing to pay a higher interest rate.

According to Malhotra and others (2006, p. 6) credit rationing occurs because would-be SME borrowers often have no financial track record and are unable to provide reliable information (information asymmetry), while banks lack the appropriate instruments for managing risk and face difficulties in enforcing contracts because of inadequate legal frameworks and inefficient court systems. In agreement with the above observation, Wang, Calvin, Walker and Redmond (2007, p. 3) observe that, in spite of their many contributions, SMEs are plagued by high failure rates and poor performance levels. The term 'finance gap', as aligned to this study, may imply 'the lack of investable capital targeted at funding SMEs that is, the segment of capital largely missing to fund a sizeable number of SMEs, regardless of those SMEs being significant economic contributors (Organisation for Economic Co-operation Development - OECD, 2006, p. 17).

There are a significant number of SMEs in South Africa that could use funds productively if they were available, but SMEs are often unsuccessful in accessing funds in the formal financial market, which comprises banks, capital markets and other suppliers (OECD, 2006, p. 17). The OECD report further posits that the finance gap can be industry-specific with varying probabilities of success per sector. This results in SMEs generally citing access to finance as one of the major constraints they face in their operations. As a World Bank survey shows, about 40% of small companies and 30% of medium-sized enterprises perceive access to finance as a major obstacle to expansion and growth (Beck & De la Torre, 2007; Peria, 2009). Consequently, a vast majority of new SMEs depend on internal finance that includes contribution from the owners, family and friends for capital needs, rather than credit from established traditional financial institutions.

In the literature, there is overwhelming evidence that access to capital remains a major constraint to SMEs' growth (Fatoki & Smit, 2011, p. 1441; Ray, 2010, p. 10). A number of studies (Beck, Demirgüç-Kunt & Vojislav, 2005; Schiffer & Weder, 2001) show that access to finance and the cost of credit are great obstacles that constrain SME growth and activity universally. According to research by the International Finance Corporation and McKinsey, there is a financing gap of between US\$140 billion to \$170 billion for SMEs on the African continent, and the result is that approximately 70 per cent of SMEs do not use external financing from financial institutions, although they are in need of it (Stein, Goland & Schiff, 2010, p. 1). Once again, this deficit in external funding has resulted in a vast majority of new SMEs having to depend on internal finance that includes contribution from the owners, family and friends (Fatoki & Smit, 2011, p. 1441). For example, in Latin America, the Inter-American Development Bank (IDB) estimates that 90% of entrepreneurs are forced to source much of their financing from personal savings.

The FinScope survey (2010, p. 2) shows that the SME sector in South Africa has an estimated 5.6 million small businesses operating, creating 11.6 million total employment opportunities, that is, six million jobs, excluding the small business owners themselves. However, there is evidence that access to capital remains a major constraint to their growth (Fatoki & Smit, 2011, p. 1441; Ray, 2010, p. 10). A study by FinMark Trust (2006, p. 12) reported that only 2% of new SMEs are able to access bank loans, while Foxcroft, Wood, Kew, Herrington & Segal (2002, p. 8) found that 75% of applications for bank credit by new SMEs in South Africa are rejected. Similarly, Fatoki and Odenyemi (2010, p. 2764) reported that, out of 445 respondents who participated in a survey, 406 (91.2%) had applied for credit from

commercial banks and, of these, 112 (27.6%) respondents were successful and 294 (72.4%) respondents were unsuccessful.

Thus, despite the contribution that SMEs make to local, their access to financing in South Africa and Sub-Saharan Africa (SSA) is extremely limited. South Africa arguably has the most developed financial markets in the region (Ray, 2010, p. 10), and yet appears not to be faring better in availing funds to the SMEs. It is therefore not surprising that 'financial constraint' is cited as the 'primary exit reason for most-new SMEs' in South Africa (Fatoki & Smit, 2011, p. 1441).

All businesses, as Cassar and Holmes (2003, p. 123) point out, require financial resources in order to start trading or to fund growth. This is especially true of new SMEs which need capital to start and expand operations, develop new products, and invest in new staff or production facilities (Atieno, 2009, p. 17). This evidence for the lack of finance, explains the 'finance gap' status faced by SMEs, since their demand for credit remains unmet.

This study, as a demand-side analysis, is concerned with factors that are internal to the SMEs and how those factors can influence access to debt and/or equity. Beck and De la Torre (2007, p. 9) describe these internal factors as 'borrower-specific' in that they are controlled by the SME and comprise the following: managerial competencies, quality of business information, availability of collateral and networking (Barbosa & Moraes, 2004, p. 23).

The problem is like all businesses, SMEs require external capital injections to grow and expand their activities because self-financing is often inadequate for their survival and growth (Atieno, 2009). Yet, as the J. P. Morgan's SME Catalyst for Growth Report (2012, p. 4) shows, many businesses in South Africa face financial constraints and often lack the collateral and financial records required to access loans from commercial banks. Thus, SMEs in South Africa find themselves subjected to a rather harsh form of what Stiglitz and Weiss (1981, p. 381) call, 'credit rationing'. The central problem of this study is that although their economic contribution is well documented SMEs in South Africa experience serious constraints in accessing funding.

The objective of this study is to identify the factors that characterize SMEs in Gauteng, South Africa and the ways in which these are to the advantage(s) and disadvantage(s) of SMEs in their drive to access credit. Thus, the study seeks to identify and describe the characteristics and levels of sophistication that are inherent in those SMEs that are successful in getting funding, and those that are unsuccessful.

## **2. Literature**

In defining SMEs the annual turnover, number of employees, and size of the balance sheet are characteristics adopted for defining the population of the study. The study focusses on small and medium entities, with a deliberate avoidance of survivalist, micro- enterprises and very small enterprises whose characteristics do not meet the chosen population. Thus, an SME is viewed as a business that could be registered as a close corporation, company, sole proprietor or partnership, with between 10 and 200 employees, operating from a fixed address and owning assets.

### **2.1. Types of finance**

According to Beck, Demirgüç-Kunt, Laeven and Vojislav (2006, p. 932), "the two primary sources of external finance for new SMEs are equity and debt. External equity, in the form of venture capital or the stock exchange, is usually not available for new SMEs. Venture capitalists often enter the company during the middle or later stages of its life cycle". According to the South African Venture Capital Association Report (2008, p. 4), "there are at least 65 venture capital funds in South Africa controlling

a total of R29 billion with an average investment size of R15.4 million. However, investment with SME focus is approximately R1.1 billion, which is only 3.8% of the funds. This indicates that the availability of venture capital is limited for new SMEs in South Africa". The lack of venture capital funds makes many new SMEs dependent on bank loans, overdrafts and suppliers of credit for early-stage financing. The South African Government, in conjunction with other financial players, has put in place various forms of funding opportunities for SMEs. These include:

- Venture capital: This form of capital, though segmented into groups, has a segment that caters for smaller, riskier and start-up investments in the range of R250, 000 to R10 million. In addition to venture capital, SMEs can be funded by the Black Economic Empowerment Commission, which is expected to cater for them.
- Government sources: Other sources of funding available to SMEs from the government include, for example, the Industrial Development Corporation (IDC) that supports industrial enterprises including SMMEs and the Department of Trade and Industry (The DTI).
- 'Mezzanine funding': "This is a funding supermarket that combines both equity and debt. It has been noted that mezzanine debt is used in a number of applications, such as: delisting transactions, acquisition finance, expansion, investment, and, more recently, economic empowerment deals". (Mallane, 2001)
- Some private sector companies, through their enterprise development initiatives, do offer SME funding for both new and existing SME projects, for example Anglo Zimele and Massmart.
- Short-term funding: This includes providing overdrafts, credit cards, personal loans, invoice discounting and debtor finance. Debtor finance involves the purchase of a customer's existing book debts and all their future sale invoices. An overdraft is usually granted for a period of one year or for a period acceptable by the client, should that period be less than one year. It is repayable on demand.
- Long-term funding: This is debt funding that has minimum loan tenure of a year. For example, long-term loans are a form of debt funding with loan tenure of ten years and above, whereas medium-term loans have loan tenure of three to ten years. In special circumstances, the tenure of a medium-term loan could be extended to fifteen years. Business term loans have loan tenure of between three and ten years, with equal monthly repayments. The capital and interest repayments are structured in accordance with the type and tenure of the loan.

## 2.2. Finance available to SMEs

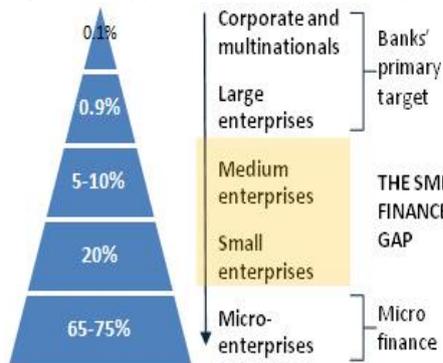
Although South Africa has a robust private sector (Ray, 2010, p. 10), most SMEs report that access to funding is a major constraint to their operations. Therefore, in order for them to contribute significantly to the South African economy, access to funding is of primary importance to SMEs (World Bank, 2000). Figure 1 illustrates the proportion of funding allocated to each sector by the banks, with the corporates and multinationals wholly funded by the banks.

Figure 1 reflects that conventional banks have a preference towards corporates and large enterprises: only 0.1% of corporate (with 99% being funded) and multinationals and 0.9% of large enterprises are declined funding (with 99, 1% being funded), compared to 65 – 75% of micro-enterprises that are declined, perpetuating the SME finance gap phenomenon.

Figure 1 also depicts a pre-emption by banks, which hinges on information availability, business risk, entity age as well as agency problems. As per the OECD Report (2006, p. 18), the problem of information asymmetry is homogeneous with SMEs. Thus, financial statement lending becomes difficult for banks due to information opaqueness entrenched in SMEs. Furthermore, SMEs are plagued by the problem of year-on-year profit volatility, which compounds business risk. The failure by SMEs to meet the banks' lending requirements increases the failure rate of SMEs in accessing funding. This

study therefore seeks to identify those internal characteristics inherent to SMEs that are attractive to the lenders.

Figure 1: Typical business landscape in emerging economies declined loans by sector



Source: Access to Finance Annual Review Report (2010, p. 2)

The literature consistently demonstrates that inadequacies in relation to finance are key barriers to company growth, leading to a mismatch between SME demand for and financial institutions' supply of finance. For example, Beck, Demirgüç-Kunt and Maksimovic (2002, p. 11) relate financial constraint to company size. Beck *et al.* (2002:18) argue, that large companies have the capacity to raise capital with the assistance of financial markets and financial intermediaries. As a result, it is the smallest companies that are most adversely affected as they lack the capacity to attract external funding. This is because of the reluctance of banks to provide loans to SMEs, which are considered high-risk investments.

SMEs in South Africa demand both start-up capital and capital for the expansion and even diversification of their service or product portfolio. Atieno (2009, p. 17) observes that finance, whether own or borrowed, is needed to expand to maximize profit, especially given the nature of SMEs. In agreement, Da Silva, Ramalho and Rui (2007) observe that all small companies operate under tight liquidity constraints, thus making finance a major problem for them. The four key funding requirements, as identified by the South African Reserve Bank (2004, p. 13) in a report conducted by the Task Group of the Policy Board for Financial Services and Regulation, are:

- Initial infrastructure investments;
- Lumpy operations costs;
- 'Next-step' expansions; and
- Unexpected opportunities requiring quick access to funds.

### 2.3. Significance of the study

As a demand-side analysis, the study will highlight the factors internal to SMEs that are perceived to be inimical to their ability to attract credit. Previous studies have focused on the demand-side of the problem, but Ayyagari, Demirgüç-Kunt and Vojislav (2008, p.484) point out that more research is required to understand SME characteristics and behaviors in specific contexts, hence this study focuses on internal characteristics of SMEs, as demanders of funding.

### 3. Research Methodology

The survey research method was used to collect data from all or part of a population to assess the relative incidence, distribution and interrelations of naturally occurring variables. The population of the study comprised the total number of clients (SMEs) which are listed in the database of one consultancy company in Gauteng that specializes in assisting SMEs to access finance. The respondents

were divided into two groups, those who successfully applied for funding and those who were unsuccessful. Four hundred questionnaires were distributed with 144 completed and returned.

The questionnaire is self-developed and based on information gained from reviewing related literature, for example the Business Sophistication Measure (BSM) Model. The researcher's experience and involvement in the industry also played a major role in informing the design of the questionnaire. The characteristics of the population in the study were compared with those aspects contained in the Business Sophistication Measure Model (BSM) as developed by Galpin (2011, p. 5367) that assesses the degree of sophistication of small businesses. The business sophistication measure embodies SME attributes that include where the SME conducts its business from, whether financial – or other records are kept, whether the SME pays tax and issues of finance (Galpin, 2011, p. 5367; Finmark Trust, 2006, p. 2).

#### **4. Results**

The statistical package SPSS Version 21.0 was used for the analysis and interpretation of findings through descriptive -, comparative – and inferential statistics and logistic regression to draw comparisons and make conclusions. Of the 144 respondents, 64 had had their loan applications approved, while 80 were declined.

##### **4.1. Personal profiles of respondents**

At 24% the majority of the respondents are in the age group 41 to 50, 18% in the 21 to 30 age group while 9% were between 51 to 60, and five per cent were between 61 and 70 years old. The respondents' qualifications ranged from Grade 11 to Master's degree level. The largest proportion of the respondents had either a diploma or certificate (35%) or degree (34%), with 6% with a Master degree and at 4% the smallest proportion had up to Grade 11.

In terms of the racial groups, black Africans were the majority of the respondents, constituting 65%, while the Asians (13%), whites (13%) and colored (9%) were in the minority. Most of the respondents in the survey were business owners or managers (60%), followed by directors (24%), while less than 5% were accounting officers, shareholders or partners. The type of business ownership varied from 56% close corporations, 22% companies, 11% sole proprietors and 11% partnerships.

##### **4.2. Business profile of the SMEs**

This section presents findings on the characteristics of the SME, which include age of operation and the type of business and ownership, as reflected in the directorship of the business.

SMEs in the survey had been in operation for an average of nine years with two years the least and 35 the maximum number of years in operation. An independent T-test was run to test for any significant statistical difference in the average age of the SMEs for which funding was approved and those that were declined. SMEs that were approved for funding had a higher average number of years in operation (9.4), compared to those that were declined (8.5). However, despite the difference noted, the results indicate that the difference is not statistically significant at the 95% confidence interval.

In determining the influence of the type of business registration on the funding approval or decline it was found that businesses registered as partnerships and companies were more likely to be approved for funding compared to sole proprietorships and close corporations. Only 25% of the close corporations and sole proprietorships got approval for funding, compared to 45% of companies and 63% of partnerships.

The study further established the link between the number of directors per SME and access to funding or lack thereof. The results show that the SMEs with more owners or directors were more likely to get funding approval compared to those with only one director or one managing member. The SMEs with four directors received 82% approvals, while those with two - 51%, three - 45% and more than five directors 50%. The results from T-tests in Table 1 also show that there were statistically significant differences between the average number of directors per SME that were approved for funding, and those that were declined funding.

Table 1: Independent sample test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
How many directors/partners/members does your business have?	Equal variances assumed	3.531	.062	-2.231	139	.027	-.568	.254	-1.071	-.064
	Equal variances not assumed			-2.148	107.471	.034	-.568	.264	-1.091	-.044
Total number of employees.	Equal variances assumed	4.405	.038	-2.235	133	.027	-.604	.270	-1.138	-.069
	Equal variances not assumed			-2.181	111.167	.031	-.604	.277	-1.153	-.055

In similar ways, the study aimed to establish the number of employees per SME and then relate this to funding approval. SMEs with more than 10 employees were more likely to get approval for funding compared to SMEs with less than 10 employees. The results also have a statistically significant difference as shown in the T-test, Table 1.

Both the number of employees and number of directors have a bearing on the size of the SMES and hence the results confirm that the larger SMEs were more likely to get funding.

The study also aimed to establish the Value Added Tax (VAT) vendor status of the company in relation to funding approval. Respondent SMEs were asked to indicate their VAT vendor status with the South African Revenue Service (SARS). The results indicate a positive correlation between VAT registered SMEs with funding success. Fifty-three percent of VAT registered SMEs were approved for funding, as opposed to only 20% of the SMEs that were non-VAT vendors.

The issue of whether business premises was rented or owned with respect to funding approval was also taken into account. Fifty-two percent of approved applications were for SMEs that were renting premises, while 40% of responding SMEs who owned premises, were approved. Those with a combination of owned and rented premises had the least percentage of grant approval at 33%.

Business turnover were correlated to the approval or decline of applications. SMEs with a lower turnover struggled to get funding with only 35% of the SMEs with a turnover below R5 million that were granted funding as opposed to 73% of the SMEs with a turnover of between R6 million to R10 million, 67% in the R21 to R25 million bracket and 75% in the R26 to R30 million bracket. An increase in the annual turnover of an SME positively correlated to its funding success probability.

The educational level of the directors or owner/managers of the SMEs showed that less academically qualified respondents had a smaller chance of getting funding approvals than those who had better qualifications, such as a degree or diploma. Only 20% of respondents with up to Grade 11 qualifications had their applications approved, 33% for those with a matric, 41% of the diploma holders, while 60% of loans were granted to those with degrees.

The findings revealed that SMEs that utilized formal accounting services had better chances of funding success at 52% compared to those that did not have formal accounting services that received funding at only 23%. The submission of financial records is a fundamental requirement for the loan application process, as it presents the historical financial performance of a business. This forms the basis for financial risk assessment from a lender's standpoint.

The primary reason for an individual starting a business was the identification of a business opportunity (46%) and the desire to be one's own boss (24%). The other reasons like flexible hours (7%), family-inherited businesses (5%) and others (5%) were far less important. The family-inherited businesses had better chances of being approved for funding (67%) compared to new business opportunities (48%). The least funded businesses were those in which an individual set up the business in order to be his/her own boss at 38% and those formed out of necessity (necessity entrepreneurs) at 29%.

The type of industry in which the SMEs operated were correlated with their access to funding. At 73% funding rejections were highest for SMEs in construction, followed by 67% rejections in respectively the wholesale industry, education, and mining services. Approvals in the engineering (62%), agriculture (50%) and retail (50%) businesses were higher.

Seed capital constraints faced by SMEs in setting up a business were also investigated. The results indicate that 64% of businesses that used funds borrowed from relatives were declined funding and 36% approved for funding after the start-up stage. Conventional banks funded 67% of SMEs that had received seed capital from the bank, with 33% of those being declined. Of those SMEs that used personal savings as seed capital, 57% were declined funding while 43% received it. Thus, conventional banks played a further role in refinancing the business to which they had granted seed capital.

Results indicated that the nature of financial needs for which respondents had made applications were diverse and included expansion capital, working capital, start-up capital, and other non-specified needs. The SMEs whose applications were for expansion capital had the highest funding approval rate of 71%, followed by those with working capital needs (61%), while those with capital expenditure needs at 48% and start-ups at 50% had the least funding approvals. Thus, the trend was that those businesses that were already in existence and seeking to grow, were more likely to attract funding than those whose nature of the need was for start-up or capital expenditure.

Information on the types of collateral and security that the respondents had when applying for funding was considered important in helping the study ascertain whether or not the type of collateral available was linked to the success or failure of a loan application. Most of the SMEs that had no collateral or any form of security were declined funding (78%), while only 22% were approved. On the other hand, SMEs with some form of security received approvals of over 50%. Most approved SMEs had tangible collateral (63%), personal sureties (60.7%) and/or intangible assets as collateral (53.4%). Therefore, approved applications were more likely to be those from businesses with tangible assets, while SMEs with intangible assets had a smaller chance of their applications being approved.

The preponderant reason for the decline of applications was debt serviceability at 56%. Unsustainable business models, at 32%, was the second most cited factor. Adverse credit profiles were indicated by 6% as a reason.

## **5. Predicting the Approval or Decline of a Loan Application**

The logistic regression procedure is a goodness-of-fit test that is used to determine whether the identified factors adequately cover the model for predicting the approval of SME loan applications. In addition, it precipitates the crucial variables in the model. Logistic regression is also suitable as it is

used to model data with dichotomous dependent variables: in this case, the applications for funding being successful or not.

Logistic regression was used to assess how well the different predictors explain the funding approval of an application. This enabled assessment of the impact of a number of factors on the likelihood of an SME succeeding or failing to access funding. The model contained 17 independent variables (predictor variables) namely:

- 1) A3 - Number of directors/partners/members.
- 2) A5 - Turnover category of the business turnover fall.
- 3) B13 - Highest formal qualification.
- 4) B11 - Age of business owner.
- 5) rA9 – For how long has the business been operating?
- 6) B10 - To which race group do you belong?
- 7) A2 - How is your business registered?
- 8) A6 - Does your business operate from owned or rented premises?
- 9) B12 - Gender.
- 10) C27.4 - No collateral/security.
- 11) C27.3 - Personal surety (with a positive net worth).
- 12) A7 - Is your business registered as a VAT vendor?
- 13) A8 - Does your business make use of formal accounting services (that is, those externally registered)?
- 14) B15.1 - Identified business opportunity.
- 15) C27.1 - Tangible, fixed property (land and buildings).
- 16) C27.2 - Intangible property e.g. shares, investments, unit trusts, cession of policies.
- 17) C27.5 - Other.

The model, as a whole, explained between 65.8% (Cox-Snell R-square) and 36.3% (Nagelkerke R-squared) of the variance in approved and declined funding applicants, and correctly classified 93.3% of cases.

*Table 2: Cases classified*

Variable label	Variable name	Score	Df	Sig.
A7(1)	VAT vendors	16.905	1	.000
A8(1)	Business with formal accounting services	12.426	1	.000
A5(1)	Business turnover less than R5m	11.197	1	.001
C27.4(1)	Tangible e.g. fixed property (land and buildings)	9.034	1	.003
B13(4)	Directors who have a degree	7.817	1	.005
A3(4)	Businesses with more than one director	6.419	1	.011
27.3(1)	Personal surety (with a positive net worth)	5.741	1	.017
C27.2(1)	Intangible e.g. Share, investments, unit trusts, cession of policies	5.639	1	.018
A5(2)	Business turnover between R5m - R10m	5.232	1	.022
B10(1)	Black businesses	3.986	1	.046

As shown in Table 2, only 10 of the independent variables made a unique statistically significant contribution to the model: VAT registration, accounting services, turnover, tangible and intangible assets, level of education, number of directors, personal surety and race. The strongest predictor of the approval of funding was registered as a VAT vendor, recording an odds ratio of 16.905. This indicated that SME owners who are registered for VAT had 16 times a better chance of funding approvals than those who had their request declined, controlling all other factors in the model. Likewise, SME owners with formal accounting services had a 12 times better chance of having their funding approved than those whose application for funding was declined (Pallant, 2007, p. 178).

Table 2 presents the results with only the constant included before any of the variables were entered into the equation. Logistic regression compares this model with a model including all the predictors to determine whether the latter model is more appropriate. This is illustrated in Table 3.

Table 3: Omnibus test

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	129.107	45	.000
	Block	129.107	45	.000
	Model	129.107	45	.000

Table 6, Omnibus Tests of Model Coefficients, gives an indication of how well the model with all the predictors performs. This is over and above the results obtained for Table 5, with only a constant in the model. Since the significant value is less than 0.05, the study concluded that the model with all the predictors fits well.

To further clarify the variables, the Hosmer and Lemeshow test was used, as illustrated in Table 4.

Table 4: Hosmer and Lemeshow

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	.982	8	.998

In Table 4, the Hosmer and Lemeshow test also supports the model as being worthwhile. This test is indicated by SPSS as the most reliable test of model fit available in SPSS (Pallant, 2007, p. 172). The Chi-square value for the Hosmer-Lemeshow goodness of fit test is .982 with a significance level of .998 that is larger than .05, indicating support for the model.

Table 5: Model summary

Model Summary			
Step	likelihood	Snell R	R Square
1	37.115 <sup>a</sup>	.659	.879

Table 5 provides an indication of the amount of variation in the dependent variable explained by the model. The two values are .659 and .879, meaning that between 65.9% and 87.9% of the variability is explained by this set of variables.

Table 6: Classification table

Classification Table <sup>a</sup>					
Observed			Predicted		Percentage Correct
			Approved Application Declined	Approved	
Step 1	Approved	Declined	53	5	91.4
	Application	Approved	3	59	95.2
Overall Percentage					93.3

## Classification

The above classification in Table 6 measures the accuracy of the model when all predictors are included in it. By adding variables, we can now predict with 93.3% accuracy; compared to only 51.7% in the model with no variables.

## 6. Summary of Findings

The main findings of the study were that through logistic regression it was determined that only 10 of the independent variables made a unique statistically significant contribution to the model that predict the funding of SMEs (in order of importance of contribution):

1. VAT registered vendors.
2. Businesses with formal accounting services.
3. Businesses turnover less than R5m.
4. Tangible assets e.g. fixed property (land and buildings).
5. Level of education, i.e. directors with degrees.
6. SMEs with more than one director.
7. Personal surety/collateral with a positive net worth.
8. Intangible assets i.e. shares, investments, unit trusts, cession of policies.
9. Business turnover R5-R10 million.
10. Race, black owned SMEs.

The strongest predictor of the approval of funding was registration as a VAT vendor and then SMEs with formal accounting services. It is suggested that SME owners consider these internal characteristics when applying for SME funding to determine the probability of their access to funding.

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## **Challenges and Opportunities for Emerging Entrepreneurs in Affordable Property Development in the Housing Gap Market**

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### **Abstract**

The emerging entrepreneurs continue to find it difficult to challenge established entrepreneurs especially in sectors such as the property development. The slow development of emerging entrepreneurs makes it difficult to introduce new players in the sector to address the housing challenges. The research is informed by the need to understand the challenges facing emerging entrepreneurs in property development that caters for the households in the gap market with a view of addressing them. The study undertook a qualitative interpretive research to identify these challenges that face the emerging entrepreneurs within the housing sector. The research conducted 15 interviews out of the total population of 76. The research concludes that emerging entrepreneurs face numerous challenges including access to finance and lack of technical skills.

### **Keywords**

Emerging entrepreneurs, housing gap market, property development

## 1. Introduction

Since the advent of democracy in South Africa, housing has dominated most policy proposals of government. These include the Reconstruction and Development Programme (RDP) that was adopted in 1994 and the 2011 National Development Plan (NDP). Although there is no major policy shift between the two, the NDP puts emphasis on economic development through infrastructure investment while the RDP emphasizes the need for free social welfare provisions such as housing. The NDP (2011) envisages that investment in infrastructure will ultimately shift the economy towards an industrial trajectory.

To foster an economy that is driven by industrial development, investment in infrastructures such as housing remains an important aspect of the NDP. This importance is emphasized by the NDP Vision 2030. The Vision 2030 assumes that investment in infrastructures will drive economic growth. Therefore, it is argued that

*“the state should (1) stop support for housing in poorly located areas and priorities development in inner cities, around transport hubs such as bus, train, ports and taxi routes and also around economic nodes (2) shift investment from support for top structures to incentive acquisition of land and development for human settlement (3) shift housing funding away from building single housing to support development with different tenure (affordable rental and social housing) and (4) lastly, the vision 2030 intends to encourage housing development by the private sector for the gap market households through public private partnership (PPP)”. (NDP, 2011, p. 255)*

The NDP acknowledges that previous government policy proposals on housing were inadequate to address the social and economic challenges such as the housing infrastructure backlog. These inadequacies include the housing policies advanced by the Reconstruction and Development Programme (RDP) in 1994, the Employment and Redistribution (GEAR) of 1996, and the Accelerated and Shared Growth Initiative- South Africa (AsgiSA) of 2006.

Although the African National Congress (ANC) has remained in power since 1994, the NDP highlights the housing policy failures of the previous policies such as RDP, GEAR and AsgiSA under the previous administrations. The failure is mainly blamed on the ambiguous proposed funding models of these policies as well as rapid and uncontrolled urbanization. As a result, the NDP accepts and acknowledges that population migration from rural to urban areas and also from neighboring states also play a role in the failure of those policies. This is because migration has put enormous pressure on infrastructures such as housing, schools, electricity, hospitals, water and sanitation.

Given all these challenges, the NDP (2011) envisages partnership between the private and public sectors as one of the possible solutions to housing backlogs. The role of the private sector in reducing shortages in this regard is highlighted in a Canadian study by Tsenkova and Witwer (2011, p. 53) who argue that “direct subsidies are required to bridge the funding gap between the cost of development and potential revenue generation in affordable rental housing”. Thus, the role of municipalities, according to Tsenkova and Witwer (2011, p. 53) is important in facilitating private sector participation in the housing market through planning and policy development.

Although Tsenkova and Witwer (2011) put emphasis on the need for direct subsidies, the NDP (2011) argues for government to move away from funding top structures in favor of investing in infrastructures that enable the development of top structures. Both the NDP (2011) and Tsenkova and Witwer (2011) studies acknowledge the importance of emerging entrepreneurs in the delivery of top structures to address the housing shortages for the households in the gap market.

To explore the housing gap market and how emerging entrepreneurs may be supported in this regard, this research focused on the role of government as a catalyst for housing development. The catalytic role of government includes the establishment of conditions and opportunities for emerging entrepreneurs to thrive as developers of affordable housing for households in the gap market.

## **2. Literature Review**

The literature will define and explore the “gap market” in affordable housing; emerging entrepreneurs; development finance and housing; public private partnership in the housing market and urban development.

### **2.1. The gap market in affordable housing**

The Cambridge online dictionary (2015) defines the gap market as “an opportunity to sell a product or service because the need or demand for it exists and no one is supplying it”. However, this definition does not elaborate on the reason for under supply or lack thereof.

The reasons that lead to demand outstripping the supply differs from one market sector to the next. This also applies to product or services offering. For instance, in the provision of housing, the gap market remains a challenge and difficult to address due to the continuous growth in income inequality and poverty (Fosu, 2010). Le Roux (2011, p. 1) argues that the continuous increase in poverty and income inequality “lead to the relegation of the poor to the periphery especially in the provision of affordable housing”.

While the banking sector defines affordability in terms of income and spending, the public sector defines it through a single dimension approach which is income scale. For instance, Statistics South Africa (2014) explains that households who should fall under the affordability group are those in the lower end or middle end of the predetermined income scale of between R54 344 and R151 728 per annum.

According to the Bureau for Market Research (2011), this scale is a reasonable basis for defining affordability based on the social and economic conditions of South Africa. These income groups are also referred to as the gap market by the Finmark Trust report (2012) and are considered to be earning higher than the threshold for social housing. According to the Finmark Trust report (2012), the gap market do not qualify for government housing subsidy despite the findings that these households are considered to be earning too low to afford bond instalments by traditional banks. The traditional banks often consider the gap market as risky for their housing bond books. As a result, there is no adequate stock in the market to address the housing shortage for the gap market.

Numerous studies have been conducted to examine how the gap market emerged (see Squires, 2008; Thellane, 2008; Lu, Ertek & Betts, 2013). With regard to housing development, Squires (2008, p. 256) found that income disparities should be blamed for the gap market since “it gives rise to increase in subprime and predatory lending” and thus lead to adverse evaluation of the gap market group by banks when applying for bond or credit.

The shortage of houses to address the housing gap market is making it difficult for the formation of new businesses that support housing development. As a result, the affordable housing market gap continues to widen leading to housing infrastructure backlog especially for the income groups who earn between R54 344 (3622 USD) and R151 728 (10 115 USD) per annum in South Africa, NDP (2011).

According to Thellane (2008, p. 13) the widening market gap in housing is also made worse by the “rapid population growth and thus necessitates the development of new housing in order to manage

with urban growth". Thellane (2008) argues that in urban areas, the residential property market is still dominated by old stocks compared to the new stock that would otherwise address the growing demand by urban populations. As a result, there are insufficient housing stocks in urban centres to cater to households in the gap market.

Despite this lack of affordable housing development for the lower to middle income groups in South Africa, the Finmark Trust (2012) report shows that other than the government, economic players such as the private sectors have not committed enough resources in addressing the housing inadequacy. Thus, there are no studies that show the involvement of emerging entrepreneurs in the development of affordable housing with respect to the housing gap market (Schellinck & Brooks, 2014, p. 328-329).

Government investment should give the private sector a level of comfort to enter into the housing market in response to the market gap. Allowing and supporting emerging entrepreneurs to do so will produce possible competitive advantages and including that of being first movers since there is a lack of interest on the part of the well-established entrepreneurs.

Thus, emerging entrepreneurs who move first into the development of housing for the gap market will have an advantage over the late comers and give them insuperable head start. Suarez and Lanzolla (2005:122) define first movers advantage "as a firm's ability to be better off than its competitors as a result of being first to market a new product category". Emerging entrepreneurs have potential opportunities to develop their businesses in this way, and those who choose to be the first movers or to get involved in the housing market will have considerable advantage over others.

## **2.2. Emerging entrepreneurs**

Nawojczyk (2008, p. 192-193) defines emerging entrepreneurs as those characterized according to "the size of the business which is small, non-aggressive approach and the preference for low-risk investment". Nawojczyk (2008) considers emerging entrepreneurs as a "solution to the growing problem of unemployment and the persisting difficulties of managing and controlling labor in large-scale organizations". This argument makes the practice of entrepreneurship attractive as it seeks to solve social and economic problem.

Based on this, it can also be argued that emerging entrepreneurs are people whose entrepreneurial skills are yet to reach their peak. Furthermore, it remains uncertain whether this kind of entrepreneurs will succeed eventually and transform into established businesses.

The Small Enterprise Development Agency (SEDA) (2004), has recognized that emerging entrepreneurs play an important role in societal development and economic empowerment. The goal of these businesses is to provide goods and services for profit. The assumption by SEDA is that the owners of such businesses are self-driven. Similarly, The Centre for Development Enterprise (CDE) (2004, p. 9) has observed this "version of entrepreneurship is associated with the conversion of change into opportunity, and with innovation, competition, and the exploitation of the new on which sustainable, market-led growth depends".

The Department of Human Settlement (2009) annual report shows that providing affordable housing for the gap market has many benefits. These benefits include the emergence of new entrepreneurs, as well as creations of jobs during the planning and development phases of different projects. The process could lead to the emergence and benefit of sub-contractors and the transfer of skills for employees working directly or indirectly during the development of housing especially in the construction sector (Lazarus, 2007). Businesses in other sectors such as security companies, estate agencies, and maintenance services also receive a boost. This leads to the creation of new jobs and the

maintenance of the existing jobs. It is the mandate of the government to create opportunities for all including the emerging entrepreneurs.

### **2.3. Development finance and housing**

According to FitzGerald (2006) development finance is, and will always remain, a source of economic prosperity for nations. Governments use taxation to fund investments for development. Countries also use development finance to offer aid to other countries whose fiscal environments cannot be sustained without outside help.

In South Africa, there are various development finance institutions such as SEDA, Development Bank of Southern Africa (DBSA), Industrial Development Corporation (IDC), National Housing Finance Corporations (NHFC) and Gauteng Partnership Fund (GPF) with different mandates that cover different sectors of the economy.

However, the mandates of these institutions often overlap. For instance, the mandate of the DBSA (2011) covers sectors that are also funded by the IDC including agricultural and manufacturing. The overlapping of mandates makes it difficult for government to optimize and channel resources to areas of need.

Other development institutions that compete against each other are the NHFC and GPF. Although it can be argued that these institutions complement each other, there is no compelling evidence that their mandates differ significantly. Both extend housing finance to low income households. They provide the much needed finance for the gap market which is considered risky. In this way, housing finance institutions create new markets for other institutions. Their role of mitigating risk in the gap market also creates opportunities for the private sector to sell new products, as Tomlinson (2006, p. 78) argues: "Housing finance institutions act as guarantors for risky funding and therefore should be seen as a way of encouraging lenders to engage with the low-income market. In addition, various lending instruments (such as mortgage loans, pension backed micro-loans, unsecured micro-loans and savings-linked-to-credit) have been offered by a variety of banks and non-bank 'alternative' micro-lenders".

Despite the risk mitigating initiatives taken by housing finance institutions, Stroebel (2003) and Tomlinson (2006) found that private housing finance institutions such as banks have not changed their attitude towards low income households with respect to mortgage lending. Their unsecured credit is assumed to be more profitable for banks compared to mortgage lending based on risk association. Banks argue that low income households carry an abnormal risk that feeds negative perceptions about this market. The lack of down payment or deposit according Tomlinson (2006), is one of the risks that low income households present to banks. This prevents such households from accessing these loans.

Other factors that lead to negative perception by the banks according to Tomlinson (2006, p. 79) are "the lack of education and a poor understanding of housing issues especially for first time home owners". Tomlinson (2006) also states that instability in the South Africa's economic climate contributes to the interest in the gap market by banks and other development finance institutions.

The emphasis on unsecured lending products shows that banks are less concerned with developmental issues like the financing of emerging entrepreneurs to improve the socio-economic conditions of households in the gap market. As a result, the government is left to bear the risks associated with development finance (Irwin, 2007).

Despite the overlaps between DFIs, entrepreneurs still find it hard to access funding from the DFIs. This is probably due to a lack of understanding of the role that emerging entrepreneurs play in the

economy. Instead of showing an awareness of these roles, DFIs tend to play up the potential risks associated with these entrepreneurs. It is important that DFIs should not be viewed in their interventionist roles but as institutions whose activities can result in the stimulation of the economy. DFIs should also be the leading agents in mitigating the risks associated with emerging entrepreneurs whose projects have the potential to yield social or monetary return.

#### **2.4. Public Private Partnership in the housing market**

Public Private Partnerships (PPP) can be argued to be a form of symbiosis between government and the private sector. Kamara (2012, p. 228) defines the symbiosis as “a form of PPP where a single private sector organization provides the financing, design, construction and operation of a facility often over a 25 to 30 year period on behalf of the government”.

Governments use PPPs to assist in the development and empowerment of emerging entrepreneurs especially in economic sectors that require intervention. With the help of the private sector, governments do not have to allocate significant budgets to partnership, although it may be required to share risk or act as guarantor. Although government seems to be outsourcing part of its responsibility to the private sector through PPPs, this should not be misconstrued as privatization. The process of PPP should be viewed as a means to accelerate service delivery through collaboration. The advantages of PPPs are well documented by the United Nations Human Settlements Programme (2011) and Kamara (2012). However, the success of the outcomes of PPPs is not clear especially in developing countries. In developed countries, the United Nations Human Settlements Programme (2011) argues that PPPs have significantly contributed to lowering costs of developing and building infrastructures. Thus, the implementations of the PPPs have a potential to increase operating efficiencies in urban development projects including the affordable housing for the gap market.

PPPs can play an important role to act as agents of infrastructure development. Emerging entrepreneurs can partner with government to deliver infrastructure such as housing especially where systems and policies are in place to give the process legitimacy and access to funding. These partnerships can help in the delivery of services to the poor in urban areas and also promote the establishment of new businesses.

In South Africa, there is no evidence to suggest that PPPs will address the market gap especially in the housing development despite the possibilities. This is compounded by inadequate financial resources (Rosen and Sullivan, 2014:123).

#### **2.5. Urban development**

Interest in urban development is a global phenomenon that is driven by the need for better living conditions. More people consider living in urban areas better than commuting to the urban areas frequently for opportunities. People choose to settle in cities so as to be closer to opportunities. This puts urban infrastructures under pressure. Some of these infrastructures were not designed to accommodate the influx of people and thus make it vulnerable to failure.

A brief overview of South Africa’s urban settlements shows that the urban usage of land especially for housing development is inefficient and uneconomical in terms of spatial planning. The government has previously not promoted housing densification. Instead social housing units are built far from workplaces and amenities. Social housing complexes are often built in vast pieces of land without consideration of future usage.

This practice, according to Patel (1996) and Goebel (2007), ranks South Africa among the top countries with the most inefficient and wasteful urban spatial planners in the world. Goebel (2007) states that

the development of low cost blocks is modelled on the “ghetto” approach. This puts such settlements on the urban peripheries. As a result, people from low income households struggle to get to work and are also placed far from major facilities such as clinic and schools. Although these urban housing developments are intended to improve the quality of life of low income households, some poor households opt to stay in informal settlements that are closer to their places of work. Recipients of the low cost housing choose to rent out their property for financial gain, a practice that was found to be prevalent in Cato Manor in a study on the sustainable reconstruction of South African Cities (Patel, 1996; Goebel, 2007).

Goebel (2007, p. 292) argues that as a result of compromised quality, “the new houses and infrastructure are of poor quality which rapidly deteriorate and often require maintenance”. The costs of fixing these deteriorating infrastructures lead to the diversion of resources by the government for maintenance. Without oversight, government pays more for services especially in the urban areas where more resources are spent.

Besides the responsibility of urban development, government also has to promote investment and job creation in urban areas. The success of the government to fulfil this responsibility is dependent on the level of integration of infrastructures and resources sharing. Without the resources, it is difficult for government to quantify and allocate resources appropriately. According to Blumenthal and Martin (2004:12), “the government could build, operate and subsidize low-income housing so that no one would be forced to be homeless, entrepreneurs should play a bigger role”. Entrepreneurs whose visions and dreams are aligned to those of the government are better placed to build and operate in the low costs housing than the government delivering housing on its own.

### **3. Problem Statement**

The Department of Human Settlement, in its annual report of 2012 acknowledges that housing infrastructure is a challenge for urban dwellers especially those within the gap market. The challenge is also acknowledged in the NDP (2011) policy document. However, the NDP (2011) sees the problem as being intertwined within the many problems that is facing South Africa.

These problems include the slow development of emerging entrepreneurs in the housing sector to address an estimated 2,2 million housing backlog by 2030, according to the NDP (2011) report. Although there are numerous studies conducted in the field of housing development, most are in the area of social housing. Examples are Driant and Li (2012) as well as Russell and James (2008) who researched subsidized rental housing construction projects. Squires (2008) focused on access to finance for urban development. None of these studies address the problem of households in the gap market and the role of emerging entrepreneurs.

Despite the existing market gap in the housing development, emerging entrepreneurs are not taking advantage of the business opportunities that exist. The research will investigate the challenges and opportunities for emerging entrepreneurs in the development of affordable housing for the households in the gap market.

### **4. Research Objectives**

The primary objective of the research was to determine how the housing gap market provides challenges and opportunities for emerging entrepreneurs in affordable property development.

The secondary objectives were formulated to determine:

- What are the main challenges facing emerging entrepreneurs in the development of affordable housing for the households in the gap market?
- If there is a correlation between the success of emerging entrepreneurs in the development of affordable housing and access to funding or credit?
- What opportunities, if any, emerging entrepreneurs can take advantage of in the development of affordable housing for the gap market?
- How government can assist emerging entrepreneurs in the affordable housing sector to realize these opportunities and to overcome the challenges that the entrepreneurs face especially for housing that falls within the gap market?

## **5. Research Design and Methodology**

The research followed a phenomenological research strategy and an interpretivist paradigm to gain understanding of the participants perceptions of their everyday experience with regard to challenges and opportunities in the development of housing for the gap market households. A qualitative research method was followed as data was collected through interviews.

### **5.1. Population and sample**

The 76 emerging entrepreneurs who participated in the Gauteng Partnership Fund (GPF) on affordable housing development programme between 2012 and 2014 formed the population of the research. The GPF is a Development Finance Institution that specialize in servicing lower income borrowers. These participants were selected due to their experience as they were subjected to the daily realities and challenges of housing development. Simple random sampling were done where 15 participants was selected as the sample of the study. According to Arfin (2013) this sample is representative for a population of 76.

### **5.2. Data collection**

The research relied on structured face-to face interviews to collect the data. The interview schedule consisted of ten questions.

### **5.3. Data analysis**

The interview data was electronically presented to a coder in a continuous transcript. In order to ascertain the reliability of the study, there was no briefing to the coder to avoid any undue influence. The sample size used for the research is reliable however the interview data will not be validated other than ensuring that it is clean and useful for the purpose of the research (Barbour, 2001; Hruschka et al., 2012; Carey, 2004). Atlas.ti was used to capture and code the data. Once the patterns, themes, evidence and trends were identified the information were interpreted and the findings presented.

## **6. Findings**

All 15 businesses were based in the Gauteng Province and was evenly spread across the province's major municipalities (Tshwane, Ekurhuleni, Mogale, Johannesburg and Emfuleni).

12 participants have been operating in property development for a period of between five years or less. Only three entrepreneurs have been in property development for more than six years. This means that almost all the participants are relatively new entrepreneurs who still require assistance and support.

It can be argued that these entrepreneurs are relatively new and will remain vulnerable if they do not receive adequate support. This is based on the assumption that the property development market is driven by the economic cycles with an average length of about 69 months, or a little less than six years according to the National Bureau of Economic Research (NBER) (2010). Many businesses often struggle to remain sustainable beyond the crisis cycle.

The average annual turnover, for two years, varies with ten business earning between R100 000 (6400 USD) and R999 000 (64000 USD) and two businesses had a turnover of less than R100 000). One participant indicated a turnover between R1 000 000 (64 000 USD) and R1 999 000 (128 000USD) and two participants indicated a turnover of over R 3 000 000 (192 300 USD). The average turnover makes these entrepreneurs “micro to small businesses” (Venter & de Clercq, 2007; National Small Business Act of 1996). These businesses fall under the category of businesses which the government has committed to support as a key means of creating jobs and growing the economy.

The findings from the interviews will be presented according to the secondary objectives formulated for the research.

**Secondary objective 1: The main challenges facing emerging entrepreneurs in the development of affordable housing for the households in the gap market**

The participants identified the following challenges: start-up finance or equity contribution, approval processes, finding suitable property that is zoned properly, technical skills, competition, marketing, transport, general logistics and an uncertain economic environment. One participant stated that “the funder does not understand our needs and are therefore unhelpful” while another participant stated that “the application process takes long to be completed”. These issues are critical for housing development projects and cannot be addressed overnight. For instance, the process of re-zoning land takes a minimum of six months and a maximum of a year to complete.

The lack of a professional team is also important as there are skills shortages relating to positions such as structural engineers, artisans and projects managers. The process of securing the services of these professionals is costly and often out of reach for most emerging entrepreneurs.

The participants consider established businesses as a threat that crowds them out especially in accessing finance and the market. This may be due to the assumption that established businesses are competing in market spaces that should otherwise be occupied by emerging entrepreneurs. Emerging entrepreneurs assume that established businesses do not require further financial assistance and should therefore allow emerging entrepreneurs an opportunity to access funding and into certain markets without competing or scrambling for resources with them. The entrepreneurs seem unaware of the fact that businesses, irrespective of size, scramble for resources to maximize profit and also for market dominance.

**Secondary objective 2: Is there a correlation between the success of emerging entrepreneurs in the development of affordable housing and access to funding or credit?**

All the emerging entrepreneurs indicated that they have applied for a loan facility from the DFI during 2012 - 2014. Eleven (11) of the entrepreneurs applied for amounts between R10 million and R20 million. Although these amounts seem exorbitant when it is compared with their average turnover, it is indeed reasonable based on the construction costs. For instance, current cost of construction ranges from R4 000 (256 USD) per square metre to R7 000 (448 USD) per square metre for an average house of 55 square metres.

One of the participants stated that “the access to funding for emerging entrepreneurs is difficult because funders always have limited resources and they require equity of up to ten per cent”. Without funding, entrepreneurs argue that they are more likely to fail especially in a capital intensive sector such as the property sector.

All the participants identified difficulties in accessing funding/credit in the housing development sector and agreed that access to funding will propel their business to new levels and also change the way emerging entrepreneurs do business. Some participants even argued that “the funder has high expectations from the emerging entrepreneurs such as knowing how to manage the project and also knowledge of project finance where as other participants are of the view that “emerging entrepreneurs are expected to raise equity despite their weak balance sheet and that makes the application process biased to those who have access to equity”. If funding challenges are addressed, the participants suggest that it would allow them to recapitalize their businesses and also engage in new ventures.

**Secondary objective 3: What opportunities, if any, can emerging entrepreneurs take advantage of in the development of affordable housing for the gap market?**

The participants have different ideas on how emerging entrepreneurs can take advantage of the housing shortages and these ideas include entrepreneurs working together with the government departments, especially the local government to address housing shortages. Participants also suggest that “local government should consider auctioning all abandoned buildings in the Central Business District (CBD) to emerging entrepreneurs in order to solve housing backlog in the gap market”. Furthermore, emerging entrepreneurs can invest in conducting market research in order to understand products that will be suitable and affordable for their businesses.

**Secondary objective 4: How can government help emerging entrepreneurs in the affordable housing sector to realize these opportunities and to overcome the challenges that the entrepreneurs face especially for housing that falls within the gap market?**

The views of the emerging entrepreneurs are that training and mentorship should be provided as by the government. Some participants suggested that “free training and mentorship is vital for the survival of emerging entrepreneurs”. This, the emerging entrepreneurs argue, should be emphasized at all spheres of government including the local government. Emerging entrepreneurs suggested that “they can work with the local municipalities in order to understand the housing needs and patterns of development with a view of solving the housing backlog especially in the gap market”. This argument is probably due to the realization that local government spending on infrastructure development is significant. Furthermore, local governments are tasked with the enforcement of by-laws such as town planning and services delivery that constitute significant spending. Some participants suggested that “Project management, financial management and construction workshops for emerging entrepreneurs” is necessary.

In general, entrepreneurs expect the government to assist them with nearly all of their challenges to survive and that can be perceived as a mentality of entitlement. Other reasons for high expectations from government can include the fact that emerging entrepreneurs often lack the skills and financial power to succeed and therefore consider government as their last hope.

The participants suggested an entrepreneurial incubation programme as a way of assisting and growing emerging entrepreneurs. The entrepreneurs seem to assume that their business are special and therefore should not be protected from competition and prevented from being eliminated. It is noted that the entrepreneurs consider the equity contribution required to access funding as a limitation to their development. This argument can easily be understood in view of their relatively low

annual turnovers. Another reason could be unreasonable expectations since almost all of the participants were applying for funding from government-owned development institutions.

This may be why emerging entrepreneurs assume that the formal requirements for equity and the criteria used by private developmental funders should not apply in their case despite the fact that such requirements are in line with the standard practice of money lending and its associated risks.

## 7. Conclusion

The conclusion of the research findings and interpretation of the results are as follows:

- There was strong clustering and grounded-ness around funding and financing. (Many examples of this term (well-grounded in the data) could be found and funding/financing was linked to a number of other important issues in entrepreneurship, hence the use of the term 'clustering').
- The role of government, down to the detail of local government, should be considered central to the success of entrepreneurs.
- Entrepreneurs felt that training and mentoring are critical for them, and that this should be provided as a public goods by government.
- Established businesses are seen to be an additional threat to the emerging entrepreneurs and almost crowd them out of access to funding and the market.
- The 15 participants had different ideas about the ways of proving new opportunities for entrepreneurs. Examples include training in soft skills versus technical skills training.

Other themes that emerged but not highly grounded in terms of frequency, were:

- The need for an entrepreneurial incubation.
- The need for informal or alternative business modelling to fund emerging entrepreneurs.
- The formal requirements for equity and the criteria used by funders do not align well with the riskier worlds of entrepreneurs.

Overall it can be concluded that participants indicated that the challenges were lack of funding and training support from the government and DFIs. These DFIs according to Tomlinson (2006), act as guarantors for risky funding especially in an environment where government is trying to develop emerging entrepreneurs. Emerging entrepreneurs assume that their success in the housing development is dependent on their ability to access funding or credit. The entrepreneurs assume that access to funding will enable them expand their businesses and also ease operational burdens such as cash flow. Based on the responses it can be concluded that there is a strong positive association between the success of emerging entrepreneurs and their access to funding.

The research found that emerging entrepreneurs do not have exclusive opportunities due to the fact that they compete with established entrepreneurs for the existing opportunities. As a result, emerging entrepreneurs are forced to compete for the opportunities on equal basis with the established entrepreneurs.

The research found that government involvement can help the entrepreneurs to make use of opportunities that would otherwise be difficult to reach. For instance, assistance by local governments could facilitate PPPs that can boost entrepreneurship in this sector (Kamara, 2012).

Government can assist emerging entrepreneurs to overcome the challenges they experience by providing technical training and mentoring.

It has also emerged from this study that identifying and understanding the housing market gap can create opportunities and revenue for emerging entrepreneurs. This is in line with Thellane's (2008) argument that in urban areas, the residential property market in Gauteng province is still dominated by old stocks.

Emerging entrepreneurs can therefore benefit by contributing to the creation of new stock. The research also reveals that government investment emerging entrepreneurs is essential for their continued existence. Supporting their participation in the housing gap market will result in increased productivity, capacity, and economic activities in general.

The importance of developmental finance institutions was shown to be critical in line with FitzGerald's (2006) observation. As such, the research has demonstrated that developmental finance institutions help entrepreneurs to grow and compete meaningfully in the economy. The study found that participants still consider the DFIs as veritable sources of funding despite reservations over the perceived long turnaround time of the application process.

These reservations, according to Tomlinson (2006, p. 79), reflect "the lack of education and a poor understanding of housing issues especially first time home owners". The situation can also be applied to the participants of this study despite the fact that the DFIs actually explain the process to them. The research concludes that collaboration between government and emerging entrepreneurs is essential. This echoes Blumenthal and Martin (2004) as well as Collier (2013) who emphasize the fact that the urban development projects can no longer be financed by the government alone.

## **8. Limitations of the Study**

The research relied on the honesty of the participants and their objectivity considering that participants are directly impacted by the study's outcome. Thus, if the interview responses from the participants are partial, the data collected is likely to be biased and therefore renders the outcome unreliable. The research therefore, relies on the fairness and impartiality of the participants in collecting the data. Furthermore, the researcher assumes that interviews from the 15 participants will be enough for the study considering time constrains although interviewing all 76 participants would have given the research more credibility.

## **9. Recommendations**

Special attention should be given to the criteria and conditions for funding emerging entrepreneurs by DFIs to improve access and turnaround time of the application process.

There is the need for government to protect emerging entrepreneurs from the established entrepreneurs especially where government has influence. This protection should solely be used to develop and promote the emerging entrepreneurs.

Government should also consider offering free training and mentorship for emerging entrepreneurs. The selection process of qualifying entrepreneurs could be determined based on minimum set criteria that can be developed by the government.

The process of funding emerging entrepreneurs should be simplified and prioritized by developmental institutions. This should entail the formulation of effective funding policies.

The local government should be given the responsibility to assist emerging entrepreneurs. This can be achieved through government policy that favors emerging entrepreneurs rather than broad based policies.

A dedicated platform for emerging entrepreneurs to engage, share ideas and seek assistance should be established. This can be managed and developed as a PPP project with enough resources to accommodate all stakeholders. The process can also include organizations that are interested in mentoring emerging entrepreneurs.

Policies that encourage those with technical skills to assist emerging entrepreneurs in capacity building should be put in place. This should include recognizing emerging entrepreneurs as economic drivers and agents of job creation.

## 10. Suggestions for Further Study

Further research is suggested that explores the importance of access to funding for emerging entrepreneurs, and how government can help emerging entrepreneurs with technical skills development. Similar study needs to be expanded to include the emerging entrepreneurs in other provinces in South Africa.

The study has shown that the main challenges facing emerging entrepreneurs in the development of affordable housing for the gap market is funding and skills. The study concludes that there are no specific opportunities in the market that can be considered to be exclusive to emerging entrepreneurs. However, the existing opportunities can be considered to be sufficient for their participation in housing development. Yet, there remains the need to protect them from established entrepreneurs. Such protection could take any form that government can decide upon including preferential funding schemes or incentives.

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## **Fason Industry in Albania: Clothing and Textile Sector**

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### **Abstract**

This research paper provides a study of Albania as a destination country through a comparative analysis with other regional countries. The paper focuses on the study the fason industry, more specifically in the clothing (garment) sector. Global value chains for textile and clothing products mark an important role in the industrialization process of a developing country. The immediate engagement of developing countries in these chains is based on key motivators, such as low entry barriers, low capital requirements, labor-intensive production and low level of skills (Gereffi & Memedovic, 2003). Analysis of fason industry in Albania, concentrated in the clothing sector, is conducted through a comparative analysis of three case studies and the results obtained from the questionnaire distributed to clothing manufacturing companies in the country.

### **Keywords**

Fason industry, distant subcontracting, Albania

## Introduction

In order to conduct a more efficient research and to get closer to the Albanian reality of clothing manufacturing industries, results and conclusions of this chapter will be based on a combined quantitative and qualitative study.<sup>1</sup> The study is conducted by means of a database obtained from direct surveys of a sample selected by manufacturing companies (fason) of clothing industry in the largest cities of Albania.

According to the latest data from AIDA Agency (Albanian Investment Development Agency), about 260 fason companies perform legal activity in our country, out of which about 200 are concentrated near the largest cities of our country: such as Tirana, Shkodra, Durrës and Elbasan, etc. Inclusion in the study of the entire population of companies, that is seemingly a relatively small number, is accompanied with related limitations that are common in direct interviews, such as the distance, the desire to respond to voluntary engagements, or the presence at the entity of authorized persons by the entrepreneur for such processes. For this purpose, with a margin of error not exceeding the maximum tolerated limit of  $\alpha=0.01$ , we have selected a sample target group of 60 legal entities, which is about 22% of their total population and some 33% of entities of the three largest cities of Albania: Tirana, Durrës, Shkodër and a more reduced number of other cities.

For purposes of data collection a structured (closed) questionnaire is designed. The goal of the use of the questionnaire is to help the researcher to achieve conclusions with statistical certainty on the population from which the sample is selected (Jankowicz, 2000). A questionnaire is considered as the technique used to collect data where any individual is asked to respond to the same questions in a specific way. So, a survey represents the individual perception of the entity in the form of answers defined in advance. In this context, the design of the questionnaire has gone through several phases:

Application of preliminary interviews for the design of the questionnaire, such as:

1. Activities carried out by companies in the global chain of clothing value.
2. The size of companies, the annual turnover (volume of contracts), their location.
3. Factors affecting the volume of contracts.
4. Costs of importance of Fason industry companies according to size of company.
5. Flexibility of clothing manufacturing companies in activity management strategy.
6. Benefits of clothing manufacturing companies from relationship with foreign customers.
7. Role of environment and stakeholders in the industry and performance of companies in the clothing industry.
8. Etc.

Design of the questionnaire is the most important step for the achievement of the main goal of the research study. The questionnaire design process took into consideration the conclusions drawn from the case studies. The case studies specified the most important factors that accompany the development process of clothing companies. The questionnaire was organized into 5 main components: the introduction of the companies; integration into the international chain of value; environment; their own and environmental assessment within the national industry; and plans for the future.

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<sup>1</sup> While the quantity based research is related to equivalence and the measurement of items, the quality based research is focused on common understanding, concepts, definitions, characteristics, metaphors, symbols, and descriptions of items ... Also, the quantity based research demands explanatory laws; while the quality based research is focused on a detailed description (Anderson, 2006).

## Textile and Clothing Industry in Europe

The textile and clothing manufacturing industry is one of the first industries that adopted the distribution of their activities worldwide, and engaged all developing countries. Expansion of this industry outside the boundaries dates back to the mid-twentieth century (Fernandez-Stark et al, 2011).

The first sub-contracted activities belong to the period 1950-1960 being transferred for the first time in Japan. Later (1970-1980), other countries of East Asia (Taiwan, Korea and Hong Kong) became the favorite destinations for the West. The highest developments date back after 1990s. China's became the main supplier of activities with low added value (cut-sewing-packing), while the second suppliers were India, Malaysia, Philippines, Indonesia and Sri Lanka (Gereffi, 2002).

Textile and clothing manufacturing industry is a typical industry of engaged countries in export-led industrialization. Reasons for early development of Fason industry are attributed to the characteristics of industry. Industry is supported by the labor force, does not require much investment in technology and has lower costs compared with all other industries (Gereffi & Memedovic, 2003). *Developing countries* continue to be the leading countries for exports of textiles and clothing (Beron, 2014).

Table 1: Exports of Textile and Clothing Industry for the period 2010-2012

No	Year	2010		2011		2012	
	Country	Exports (mln\$)	%	Exports (mln\$)	%	Exports (mln\$)	%
1	China	242,047	40.0%	283,973	39.9%	288,183	40.7%
2	EU	168,058	27.8%	193,763	27.2%	178,262	25.2%
3	India	20,462	3.4%	30,012	4.2%	29,107	4.1%
4	Turkey	21,724	3.6%	24,720	3.5%	25,344	3.6%
5	Bangladesh	16,118	2.7%	20,803	2.9%	21,582	3.0%
6	USA	16,863	2.8%	19,024	2.7%	19,099	2.7%
7	Vietnam	13,451	2.2%	16,919	2.4%	18,185	2.6%
8	Korea	12,578	2.1%	14,209	2.0%	13,880	2.0%
9	Pakistan	11,778	1.9%	13,632	1.9%	12,919	1.8%
10	Indonesia	10,964	1.8%	12,836	1.8%	12,065	1.7%
	Total	605,313	100%	711,474	100%	708,354	100%

## Fason Industry in Albania

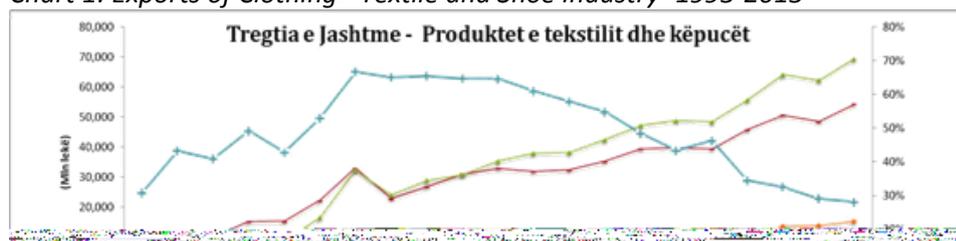
Manufacturing based on orders by Western companies (Dutch, German, etc.) started since 1980-1985 (Myrseli, 2014; Roukova et.al 2012). Textile and clothing manufacturing industry is an important source of employment (45,000 employees) all around major cities of the country, such as Tirana, Durrës, Berat, Korça and Shkodra, etc. Clothing manufacturing sector accounted for about 20 companies with a number from 100 to 3,000 employees each. The textile manufacturing industry produced both for domestic and foreign markets. Distribution of manufacturing based on order for enterprises in the country was not accidental. Artisans of Handicraft Enterprise in Tirana, in accordance with demands from Western companies, judged based on the best manufacturing enterprise skills and it had a mediator role for the conclusion of contracts (Myrseli, 2014).

Change of regime after 1990 was associated with interruption of the activity of these industries. According to (Myrseli, 2014; Teli, 2014) the main reasons were:

1. The loss of domestic market as a result of the competitiveness of imports;
2. Unconsidered privatization of these enterprises;
3. Backward production technology;
4. Lack of funding and experience of management of private businesses.

The industry was part of the privatization process in 1992-1993 with the investment of foreign companies. Locations of private entities in the main cities were in rented facilities of former state-owned enterprises. Established companies were foreign-owned or joint venture type, mainly Italian, Greek and German. Formation of private entities for clothing manufacturing was simulated by a number of factors, worth mentioning among the most important ones: low manufacturing costs, a skilled labor force, and a favorable geographical position. In 2000, Albania's trade balance turns to positive values, while in 2005 it is the main exporting industry in Albania. Positive export values are a positive indicator related to employment and increase of economic welfare in Albanian families (Ministry of Economic Development, Trade and Entrepreneurship, 2013).

Chart 1: Exports of Clothing - Textile and Shoe Industry -1993-2013



Source: INSTAT (2014)

In the period 2007-2012, the growth of exports was stable. In 2012, this sector accounted for 29.2% of total exports.

Table 2: Exports in million Euros for the period 2007-2012

No.	Sectors/Years	2007	2008	2009	2010	2011	2012
1	Minerals and Hydrocarbons	121.3	166	156	324	418.15	521.602
2	Textile and Shoes	380	397	367	403.6	455.6	425
3	Construction Materials	125.8	185.65	100.2	237.75	299.4	289

Source: Ministry of Economic Development, Trade and Entrepreneurship (2013)

Despite the weight of industry (including shoes) in Albanian exports, its size is modest in real terms. The main reason is the engagement in activities with low added value. Companies operate with low turnover levels, face an increasing competition, keeping the prices down and work costs. The numbers for specific ordered items is decreased, but the number of articles is increased and the delivery time is shortened.

Companies of the clothing industry are price-recipient, as European customers govern these types of chains. Two main priorities of Albanian industry are the geographical proximity and lower costs of labor force compared with the region. One of the main problems in relationships with clients is the term of contracts. Annual terms of these contracts increase the degree of uncertainty about the future (ISB, 2010). Textile and clothing manufacturing industry in the country is mainly represented by manufacturing of clothing and by a smaller number of manufacturing of textiles. Companies make use of a part of the existing facilities, the cheap cost of labor force, and experience of employees.

Joint venture companies are mainly Italian, Greek and German investing. These companies use modern manufacturing technology. In this sector, the value of exports for 2011 totaled 238.6 million Euros. The number of employees at the end of 2010, according to INSTAT went to about 15 thousand employees.

The leather and shoe industry are mainly represented by local processing companies that work with raw materials of the clients. This industry has made use of the same opportunities as that of clothing. This branch, according to INSTAT, employs 10,600 employees and the value of exports for 2011 amounted to 216 million Euros (Ministry of Economic Development, Trade and Entrepreneurship, 2013).

Albanian textile and clothing manufacturing industry is the second sector in the employment of women, after the agriculture sector (90% of employees are women). On the other side, wages of this sector are the lowest in the domestic economy (compared with the minimum wage). The ratio between the costs of labor force of this industry in Albania compared with Italy is 1 with 10, and compared with Greece is 5 times lower (DHKPV, 2013).

Companies, depending on the minimum wage, try to make an estimate of the cost of labor force based on average rate of a working day. The training is conducted at the beginning of the work through 1-3 month courses. A part of employees in this industry are from urban surroundings in difficult economic conditions and low level skills (Myrseli, 2014). Lack of skilled workers demands the training of employees in specific work processes. MMSR data (2014), show that the number of students enrolled in 2011 in professional schools for the textile branch is 1.7%, while the number of graduates in dressmaking training centers grew to 6.4%. The findings highlight the need for training during manufacturing line operations and improve organizational and management working skills (ISB, 2010).

According to available data, 64% of companies are specialized and manufacturing more than one article. Only 36% are focused on the production of a single type of article. The clothes are mostly light (underwear articles, shirts, pants, etc.).

*Percentage of companies according to the number of manufacturing products made by order (year 2013)*

Several clothing products (64%)

One clothing product (36%)

*Chart 2: Distribution of companies by number of articles produced*



Source: AIDA\_Fason (2014).

In 2010, 332 companies existed in Fasonindustry, of which 30% had up to 50 employees<sup>2</sup> and 70% had 51 employees and higher. The breakdown of companies by origin of capital is 19% with foreign-owned capital and 81% with local-owned capital (Gjika, 2011).

For 2013, data received from the sample of AIDA\_Fason (2014) on the population of companies engaged in the clothing industry reflect the following indicators related to the size of companies:

The average number of employees in a company is 104.

The average annual volume of contracts is approximately 575. 532 euros.

<sup>2</sup> Classification is made by INSTAT listing the four first classes (1-50 employees) and the fifth class with over 50 employees.

The increase of activity of companies of this industry (translated into volume contracts for 2013) has a positive effect on the growth of employment in the country. To verify the extent of the relationship between these factors, in view of the perception of entrepreneurs of these companies, we have analyzed their linear relationship by means of linear regression through SPSS-V21 program. Statistical processing data of AIDA\_Fason(2014) give the following results:

Model Summary							
Model	R	R - Square	R – Adjusted Square	Standard Assessment Error	Change Statistics		
1	.528	.278	.271	92.74801	Change R-Square	F	Sig
					.278	38.175	0.000
1. Non-Constant Variable: Number of Employees							
2. Explanatory Variables: (Constant), Volume of Contracts (in 100.000 Euros)							

Source: Data Processing AIDA\_Fason (2014)

*Table 3: Summary of the linear relationship model "No. of Employees & Contract Volume "*

Coefficients						
Model		Non – Standard Coefficients		Standard Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	62.146	11.455		5.425	.000
	Contract Volume	8.134	1.316	.528	6.179	.000

Source: Data Processing AIDA\_Fason (2014)

Econometric model derived from analysis of data according to the above table is:

$$\text{No. of Employees} = 62,146 + 8,134 \text{ Volume of Contract} + e$$

Selection of the number of employees as a non-constant variable and the Volume of Contracts as an independent variable is based on the characteristics of ZGV-Clothing led by customers (order makers) and the characteristic of labor-intensive industry. This model is statistically significant with a 0.000 significance level. The adjusted coefficient turns out to be 0.271, which means that 27.1% of the variation in the number of employees is explained by the variation in the volume of contracts. Other factors not included in the model are for example investments in technology or effects brought by incentive policies for the development of industry, etc. Also, for any increase in the volume of contracts with 100.000 Euros, the number of employees is expected to grow on average by about 8 (or more precisely 8,134).

#### **Case studies – Determining factors for success of fason industry companies, clothing sector**

Presentation of three case studies is a selective approach after conducting several interviews with managers of fason companies of the clothing sector. Reasons of the reduction are related to a quantity and quality based character. Most of the companies of fason clothing industry are part of the international supply chains thanks to in-country subcontracts by the most successful companies of this industry. Dependence by main important companies like "TRIKOT" sh.p.k (Shkodër), "BELLA CONFEX" Sh.p.k. (Shkodër), "MODA TELI" sh.pk, "BLUE ICE" sh.pk (Durrës), "Flavio 98" sh.pk (Tirana) etc., but also the fact of complete responses, has reduced to three the number of cases studies. The three case studies have a long and successful experience with the third parties' consensus in the country and relationships with international customers.

**Case Study "MODA TELI" Sh.p.k.**

*"Qualifications, a key factor to the success of the companies and the transition to production of high fashion design."*

The Company "MODA TELI" Sh.p.k is a limited liability company operating under the Law on Trade Companies in Albania. Location of the company is in the Industrial Zone of Shkodra. The company was established in 1994 and operates in the area of outerwear clothing manufacturing, under distant subcontracting agreements (order-made manufacturing) for Western companies (German, Italian, etc.). The main products it produces are: pants, shirts, dresses, etc. In 2014, the number of employees was 100 of which 94% are women and 6% are men. The highest percentage of employees is to functions related to the manufacturing process.

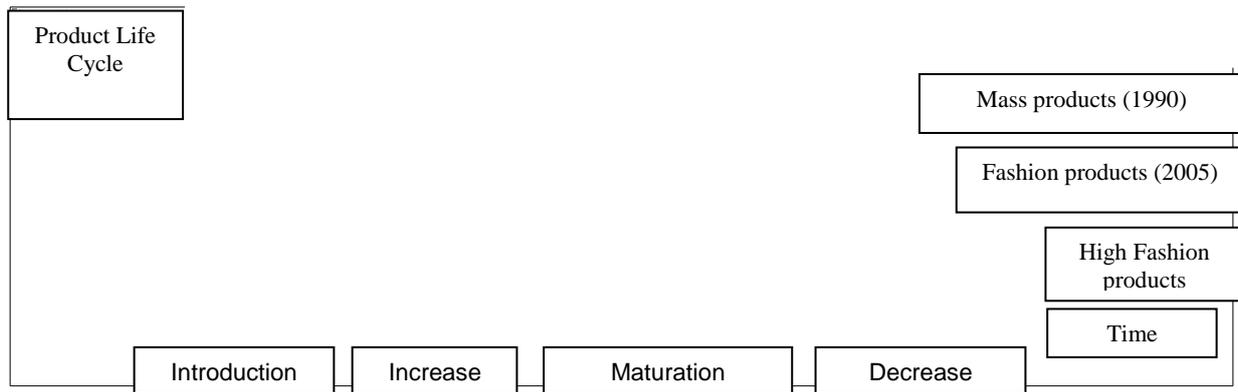
Normal monthly production capacity is 8000-10000 units. The entire amount is intended for export. The company operates with main raw materials by the order makers. The manufacturing cycle activities of the company perform cutting, sewing and packaging, delivering the completed products to clients (order makers). The completed products are directly destined to international markets of Western Europe, such as Italy, Germany, etc.

The work process of the company is accomplished according to the technological manufacturing process, divided into main manufacturing phases and other specific units or auxiliary facilities. From 1994 until today, they have gone through 21 years of experience. During this period, the company has experienced various events both within and out of the enterprise. Key highlights in the history of the company are as follows:

In 1994, structural changes were made as a result of organizational transformation from state-owned property into private property. During this period the company experienced reduction in administrative staff (50%) and an improvement in the level of wages. In 1996, the company realized a significant improvement in the technology, introduced the new operational technology of "concentrated steam" ironing, and also restructured the scheme of movement technology by processes (operations) increasing the difficulty of manufacturing items (models). The events of 1997 led to the withdrawal of the key clients of the company and the resumption of activity from scratch (with new clients).

Changes in fashion concept over the period 2000-2010 were accompanied with continued improvements in technological production lines and with the introduction of modern machinery and special equipment in the enterprise. This intervention was in line with the need of adapting the requirements to Western markets. In the early 90's, the fashion was massive and programmed. During the years 2000-2005 products ordered by customers returned to nature of "*Pronto Moda*" (fashion based on request). In 2010, a special market segment, named "High Fashion" was developed (Teli, 2014). *Today, thanks to the experience in management and vision, the company provides manufacturing of clothing for high fashion clients.*

Chart 3: Product life cycle of the Clothing Industry from 1990 to 2010



Source: Adapted by Marius (2010) and Teli (2014)

### Case Study "BELLA CONFEX" Sh.p.k.

*"Supporting a business plan (work of two young students) and the way to success."*

The Company "Bella Confex" Sh.p.k. started its business activity in February 2003 based on the initiative of two youngsters with a business plan designed when they were at the benches of the Faculty of Economics of Shkodra. The initiative and courage of the two young men went beyond the doors of the university with a concrete proposal of their work in the company "Madish" sh.p.k. Thanks to the support of their ideas they began the business operations in 2003 as subcontractors of "Madish" sh.p.k, which produces based on order products for the Italian company Cotonella s.p.a. Their company began with a modest number of 15 employees and a structure of financial resources of 50% capital stock and 50% debt. Today, this company is one of the most successful companies in the city of Shkodra manufacturing made by order products such as underwear (intimate clothes for men and women) to two major Italian clients. In 2014, the company counts 470 employees out of which 5% are college graduates, 8% medium-skilled employees and the rest are ordinary people (with low level of qualification).

After over 12 years of experience (2003-2015), the Company has achieved sustainable growth, but two are the key events marked in its history:

The presentation was during the fair of "Porte de Versaille" in the French capital where two companies exchanged the catalogs. Success achieved with the sample-test by "Bella Confex" at the request of the Italian company, is the new turn and final separation from "Madish" Sh.p.k. This year, the company starts the activity to contract directly with orders made by Italy.

In 2011, the company intensely invested to launch in the market a line of products under its own trademark. Despite market research, investment in technology and materials, participation in national and international fairs, and product advertising, the company failed to succeed. This happened for two reasons: 1) The domestic market is very small and purchasing power is low; 2) the company is unknown to the international market.

### Case Study "ABC Company"<sup>3</sup>

*"The use of "Game Theory" to further reduce prices of manufacturing contracts with orders made in the country."*

The company "ABC" started its business activity in Tirana as a limited liability company in 1998. The form of organization is a joint venture of Italian and Albanian partners. The company activity is cutting, sewing and packing shirts for men with packing raw material to the customer. It is subcontractor of an Italian company that works based on orders made by clients of the Italian fashion industry. The company produces collections for the next season. The structure of financial resources when the activity started was 100% its own capital. Currently, the company employs 165 employees, of which 3% is at management level and the rest is directly engaged in the production.

During the period 1998-2014, the company has produced based on the order of a single customer and has meanwhile increased the quantity of items. Unlike other companies of the industry, the company ABC has used a different strategy for the production of the quantity made by order. Preservation of the same number of employees is compensated by third party engagements in the country with short-term contracts. This strategy has served for cost reduction and efficient use of financial resources in improvement of manufacturing technology and the future opening of a subsidiary business in another city. In the engagement of third parties the company uses the logic of "game theory" using lack of information of companies about each other and reducing the price of contracts. However, the company undertakes a high risk too; potential lack of production in time and quality standards of the orders made by the subcontractor.

*The company considers as important factors in its success: 1) quality and timely delivery of the product; 2) specialization in a single product; 3) family management of the business activity; 4) the engagement (consent) of third parties to cover the short term demands (orders).*

### Findings from case studies

The form of financing the companies is only from their own resources. Improved technology is directly linked with the capital invested and the profits of companies.

Investing in technology is a requirement for improving labor output and product quality. Increasing product complexity (articles) requires constant improved technology.

Two of the three companies have met with clients at fairs. The form of presentation is a very important factor not only for the party making orders, but also for domestic companies. Experience helps in the selection of serious customers.

Foreign demands are important for the future of the fashion industry in the country, at a time when the market in the country is small and import products have lower prices (import of products from China or Turkey) (Teli, 2014).

One of the priorities of companies is the relationship with human resources. Their training, financial and moral incentives are important factors for reducing employee circulation at work. The average wage of an ordinary employee is the minimum wage. Calculation of wage supplements is made by calculating the work beyond the standard work rate. The industry has the highest proportion of women employed. High proportion comes as a result of marriage, leaving abroad, birth deliveries, etc. This makes the work difficult, because it is organized as a chain work.

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<sup>3</sup> Name of the company is not real, with the request made by the entity to preserve anonymity.

One of the three companies indicates the problem of employment of unskilled labor force as a result of low cooperation with professional schools and the lack of training centers. Another problem in the system of professional/vocational training is that their training programs are often of a low quality and do not offer the skills required by the labor market. This is associated with the limited cooperation between the private and public sector. Coordination between the government, companies, associations, and in certain areas even with customers, is central to the development of a system of training programs outside the company to ensure the development of skills required by the market.

Cooperation with local or central government is very weak. The only relationship is the payment of their obligations, while they do not feel supported. Within the industry, companies cooperate with each other in periods when it is not possible to complete all the orders by themselves.

*The positive performance of the company is attributed to:*

- Education and economic training and management of the head of the enterprise and the staff of the manufacturing department.
- Low productivity is partly linked with the lack of skilled employees, but more importantly, a lack of appropriate skills at managing and supervisory level.

## **Conclusion**

Managers and supervisors have a crucial role in determining the levels of productivity, labor relations and the potential for improvement of fason businesses in the following directions:

- Conclusion of contracts with the right customers
- Identifying and implementation of proper Strategy to conduct operations within the company.
- Daily monitoring of meeting the work targets of employment for each employee

As a result of this study, we reach to the conclusion that the role of Management is essential for the success of companies operating in fason industry. They should be at the right professional level and have a long experience in order to manage effectively the problems they face, such as:

1. Internal - Absence from work and disregard of discipline during working hours. Defects in product lines (technical, electrical and mechanical).
2. External – a) Relations with the customs (in the field of import/ export); b) Relations with other institutions (bureaucratic delays); c) Relationships with customers (Lack of delivery (supply) at the right time of raw and auxiliary materials and Lack of timely liquidation of orders)

In the case of companies included in the study, functional improvement of the three companies was not possible to be reached due to lack of financial resources, small domestic market, the strategy chosen by the client (tactical subcontracting), high competition with regional countries etc. Company "*Bella Confex*" is the only one of three companies which wanted to come up with its own brand, introducing OBM activity (manufacturing under own brand) within ZGV, but this proved to be unsuccessful.

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## Management Capacity within Small Medium Tourism Enterprises (SMTEs)

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### Extended Abstract

#### Introduction

This paper presents a literature review of SMTEs and addresses the need of management capacity to build these enterprises. In South Africa, small and medium tourism enterprise development is regarded as a low cost means of addressing the country's geographical inequalities and promoting entrepreneurial activities so as to harness the country's full potential. In the past decade it has been widely accepted by the tourism industry that small and medium tourism enterprises (SMTEs) make an important contribution to the industry and the economy.

#### Literature

Researchers suggest that the importance of management development cannot be over emphasized in order to gain a better understanding of the practices of successful small and medium tourism enterprises (SMTEs) and to support the improved performance outcomes of SMTEs in general. Given this background of management development in SMTEs is thus vitally important for the sustainability of such businesses within the tourism industry.

It would be difficult to overestimate the lack of management capacity need for SMTE's to grow and develop. SMTE's are particularly poised to play an important role because of the significant role to job creation, poverty alleviation and growth. In the context of developing economies such as South Africa, since 1994, new tourism policy on tourism development has been put in place to guide the development of the country's small medium tourism enterprises (SMTEs) and to change the direction of the tourism industry. It is estimated that approximately 80 percent of small businesses fail in their first year of operation in South Africa (SA). It is further highlights that the entrepreneurial levels are about 25 percent in countries such as Nigeria, Ghana and Zambia. This plight is of much concern in that small business development is major criteria for creating jobs and unlocking economic development opportunities. However, the status quo in South Africa is contrary to what is envisaged. As such South Africa's levels of entrepreneurship are low, considering the fact that the country is perceived to be the engine of Africa's economy.

#### Method

A comprehensive literature search was conducted in order to identify as many factors as possible that could influence the success of SMTEs. International and national data searches were done by the Library of the Nelson Mandela Metropolitan University and to date include: Sabinet databases; ISAP (National library of South Africa); and SAe Publications; EBSCO: Master File premier, Business Source premier, Academic Source premier; FS Articles First; Kovsidex; SA Cat and FS Worldcat; ScienceDirect; UPECAT; Google searches; Dialog; Dissertation Abstracts database and the database of the Family Business Review.

### **Results**

The Eastern Cape Province has developed on the periphery of the national economy, and has, with the exception of Coega, seen little new economic infrastructure investment over the past 30 years. Hence, a gap seems to exist in terms management capacity as a tool to develop and grow SMTEs in South Africa, and particularly in the Eastern Cape Province. The move towards understanding the lack of management capacity is pertinent in order to comprehend the factors that contribute to the failure and success of SMTEs. As a result numerous questions arise as to what it takes for SMTE owners/managers to deal with lack of management capacity effectively. What was of further significance for this paper is that very few studies focused on the lack of management capacity and models of implementation for SMTEs. Thus, it was also identified that there is gap of knowledge with particular reference to management capacity approach implementation in SMTEs of South Africa. Moreover, there is paucity of research whereby proposed a simplistic model of management capacity needs to be used by SMTEs in South Africa. Eastern Cape Province, economically is the poorest province in South Africa, is characterized by high levels of unemployment, poverty and crime. As such management development must be identified as a key strategy to play a significant role in this light.

### **Conclusion**

This paper highlights that much of the management development literature is dominated by the concerns of the development needs of small and large organization. Managers that are running small firms have a wider variety of roles and different priorities than those running larger enterprises. In effect, the naïve assumption is that small firms are waiting to be big, and given enough time, support and advice they will achieve such an ambition. In order to achieve this ambition, the SMTEs ought to engage in management development programmes or initiatives.

### **Relevance to industry**

This paper contributes to the largely under researched niche area of management development within small business in South Africa.

### **Keywords**

Entrepreneurship, small business, management development

## **Outsourcing: From a Review of Basic Characteristics of Outsourcing to an Illustration with Features of Outsourcing Market in Vietnam**

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### **Abstract**

The term “outsourcing” becomes more and more popular in the business environment nowadays, especially in international commerce environment. This paper mainly explores basic characteristics of outsourcing consisting of definition of an outsourcing model, classification of outsourcing decisions, motivations for engaging in outsourcing, as well as major outsourcing errors and how to avoid these errors. In addition, risks, challenges, and potential solutions to offshore outsourcing are also reviewed. Finally, features of outsourcing market in Vietnam are discovered to explain why this developing country is known as an attractive outsourcing destination in the world.

### **Keywords**

Outsourcing, Vietnam

## 1. Outsourcing Model – A Type of Human Resource (HR) System

The majority of researchers on outsourcing define outsourcing as delegating a third party or an outside supplier to perform a task, function or process that was previously conducted internally because of business-level benefits.

Boxall & Purcell (2011) suggested outsourcing model being a type of human resource system among seven typical types. These seven types of HR system are familial, informal, industrial, salaried, high-involvement, craft-professional, and outsourcing models. Among these types, outsourcing model indicates a HR system towards cost savings based on outsourcing non-core activities to a specialist supplier in the country of domicile or offshore outsourcing these activities to a lower-cost country in the tendency of globalization, deregulation, new technologies and public sector reforms (Boxall & Purcell, 2011). In terms of the nature of an outsourcing model, it does not possess its own specific traits because an outsourcer can select any one or more of the familial, informal, industrial, salaried, high-involvement, or craft-professional models in its different cultural and regulatory guises (Boxall & Purcell, 2011). Also, the authors mentioned that the outsourced system are normally combined with the salaried system in flexible bureaucracies that are large organizations wishing to create “a better balance between short-run efficiency and long-run agility” such as multinational firms, large service companies in deregulated industries, and public sector organizations. In addition to remaining a salaried hierarchy, these organizations expand outsourcing for non-core activities or specialist functions not only to reduce workforces that leads to lessen labor costs, but also to wriggle out of long-term employment commitments.

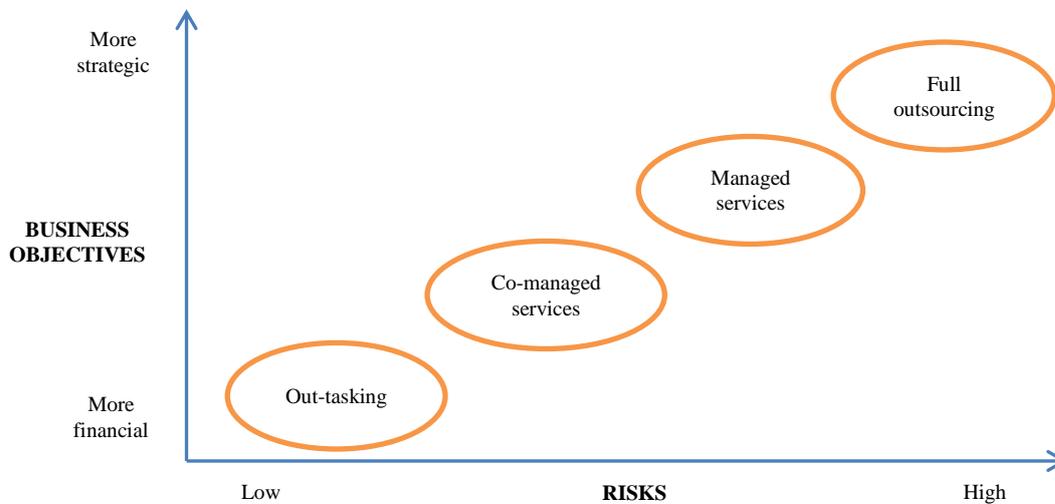
## 2. Classification of Outsourcing Decisions

Based on the scope of the function assigned to an outside supplier and the criticality of the outsourced function, Sanders et al. (2007) proposed four various outsourcing categories comprising *out-tasking*, *co-managed services*, *managed services*, and *full-outsourcing*. These four categories can be arranged into two groups, *tactical-level outsourcing* and *strategic outsourcing* engagements with the former containing *out-tasking* together with *co-managed services*, and the latter embracing *managed services* along with *full-outsourcing*.

*Out-tasking* is a form of outsourcing with the lowest scope of task outsourced. The client firm assigns only one aspect of the total function to an outside supplier. The assigned task is more tactical and usually has lower criticality to the firm compared with tasks in other outsourcing categories. The second outsourcing form is *co-managed services* with a larger scope of assigned tasks in comparison with the first engagement. However, in this engagement, it is necessary for both client and supplier to share responsibility in managing these tasks. Sanders et al. (2007) called these two forms as *tactical-level outsourcing* engagements because in most cases, they are used to meet financial objectives for the client firm such as reducing costs or overcoming a short-term lack of capital. In some cases, they can be applied for resource objectives or expanding geographic reach.

The remaining categories are *managed services* and *full-outsourcing*. To *managed services*, all aspects of the function, such as implementation, management and ongoing improvement, are assigned to an outside partner whereas to *full-outsourcing*, the client engages the supplier to design, implement, manage and even provide strategic directions of the function to customize to the business environment of the client. These two outsourcing forms are related to *strategic outsourcing* engagements that focus on strategic objectives to achieve competitive advantage rather than short-term financial benefits. Therefore, their risks will be much higher than risks of *tactical-level outsourcing* engagements (Sanders et al., 2007). An arrangement of outsourcing engagements according to features of business objectives and risk levels is illustrated in Figure 1.

Figure 1: Business Objectives and Risks of Outsourcing Engagements



Source: Sanders et al. (2007)

### 3. Motivations for Engaging in Outsourcing

The research of Sanders et al. (2007) on various categories of outsourcing showed that there might be different motivations for engaging in outsourcing, from financial reasons to strategic ones. Ok (2011) listed thirteen possible motivations affecting decisions to conduct international outsourcing activities. They were *reduction of labor costs, reduction of other costs, access to new markets, following the behavior of competitors, improvement of quality or introduction of new products, strategic decisions taken by the group head, focus on core business, access to specialized knowledge, tax or other financial advantage, lack of available labor, improved competitiveness, improved logistics, and less regulation affecting the enterprise*. After measuring the importance of above motivational factors on a sample of 1002 Dutch firms from different fields in 2009, he/she found that *reduction of labor costs* was the most important reason for making decisions related to international outsourcing in the Netherlands. Other importance reasons (*improved competitiveness, strategic decisions taken by the group head, and reduction of other costs*) were also supported by Dutch companies.

Cutting costs seems to an extremely important reason to motivate outsourcing activities. It is not surprised to see from Table 1, that lists top 20 outsourcing destinations in the year of 2015 as the anticipation of Tholons (2014), that the majority of attractive outsourcing destinations are in Asia Pacific with the highest rankings assigned for India because most incurred costs (especially labor costs) in developing countries in Asia Pacific are much lower than in developed countries in Europe and America. One interesting thing is that Poland is a country having the highest attractiveness for outsourcing services among European countries and holding the 9<sup>th</sup> rank among the top 20 outsourcing destinations (Table 1). Kubica (2015) argued that outsourcing market in Poland is stunningly attractive because it has not only low ratio of costs to services' quality, high-qualified personnel but also flexibility of legal regulations regarding market requirements in comparison with other members in the European Union.

Table 1: Top 20 Outsourcing Destinations 2015

Rank 2014	Rank 2015	Movement	Region	Country	City
1	1	—	Asia Pacific	India	Bangalore
2	2	—	Asia Pacific	Philippines	Manila (NCR)
3	3	—	Asia Pacific	India	Mumbai
4	4	—	Asia Pacific	India	Delhi (NCR)
5	5	—	Asia Pacific	India	Chennai
6	6	—	Asia Pacific	India	Hyderabad
7	7	—	Asia Pacific	India	Pune
8	8	—	Asia Pacific	Philippines	Cebu City
9	9	—	Europe	Poland	Kraków
11	10	+1	Asia Pacific	China	Shanghai
13	11	+2	Americas	Costa Rica	San José
10	12	-2	Europe	Ireland	Dublin
12	13	-1	Asia Pacific	China	Beijing
14	14	—	Asia Pacific	China	Dalian (Dairen)
16	15	+1	Europe	Czech Republic	Prague
19	16	+3	Asia Pacific	Sri Lanka	Colombo
15	17	-2	Asia Pacific	China	Shenzhen
17	18	-1	Asia Pacific	Vietnam	Ho Chi Minh City
18	19	-1	Asia Pacific	Malaysia	Kuala Lumpur
22	20	+2	Asia Pacific	Vietnam	Hanoi

Source: Tholons, (2014)

Another significant advantage of outsourcing and offshoring to the Customer is the possibility of access to an external company's intellectual capital. The Customer usually derives this benefit from *business process outsourcing* (BPO). Kubica (2015) described a business process transition when an outsourcing company operating on the Polish market was delegated by a client firm in other country to deal with accounting matters for the Customer. This process began when the Customer signed an outsourcing contract with the Vendor. Next, The Vendor in Poland assigned a Transition Manager and created a transition team. Employees who worked in this team could be called as Business Process Outsourcing (BPO) employees. After that, the Vendor selected some team members who would leave for the Customer's seat and applied a boarding program with training courses from different entities (Finance Department, Human Resource Department, Business Analyst, and the Transition Manager) for these selected members in the team before they left Poland for the Customer's seat. When selected BPO employees came to workplace of the foreign Customer, kick-off meeting and working shadowing were conducted so that the Customer's employees could transfer their possessed knowledge properly to BPO employees. And when they came back to Poland, their responsibilities were teaching knowledge they learnt to other team members in Poland, continuously cooperating with the Customer's employees to implement the process in the beginning periods, and verifying the correctness of the team's activities in Poland in order to guarantee that the process would be implemented completely and successfully by the Polish team afterwards (Kubica, 2015). Thus, if this transition process is successful, the Customer can access to international intellectual capital resources of a Polish company that might result in a reduction in operational costs and an increase in the quality of actions (Ciesielska, 2009 as cited in Kubica, 2015, p. 241).

#### 4. Major Outsourcing Errors and how to Avoid These Errors

Based on a survey of 91 outsourcing efforts in Europe and the United States, Barthélemy (2003) found seven major outsourcing errors. The first error was that the firms made wrong decisions in choosing outsourced activities that were too close to their core businesses. Therefore, it would be really important for managers in the client firm to know which activity or function should be outsourced to outside vendors.

Wheelen & Hunger (2006) proposed an outsourcing matrix that showed which activity or function should be considered to outsource. It can be seen from figure 2 that an activity or function that has low potential for competitive advantage should be the subject for outsourcing completely. In particular, an activity should be bought on the open market if its value accounts for a small proportion of the total value of products or services. However, in case the activity plays an essential role in adding to total value of products or services, the firm should sign long-term contracts with reliable vendors to purchase this function. Thus, in order to make a right outsourcing decision, Wheelen & Hunger (2006) laid stress on identifying core competencies of the company before recognizing which activities are important or not important to those competencies so that the firm can strengthen the competencies continually and preserve its competitive advantage.

Figure 2: Outsourcing Matrix

		Activity's Total Value-Added to Firm's Products and Services	
		Low	High
Activity's Potential for Competitive Advantage	High	<b>Taper Vertical Integration:</b> Produce Some Internally	<b>Full Vertical Integration:</b> Produce All Internally
	Low	<b>Outsource Completely:</b> Buy on Open Market	<b>Outsource Completely:</b> Purchase with Long-Term Contracts

Source: Wheelen & Hunger, (2006)

The second outsourcing error was selecting wrong vendors who were not proficient and trustworthy (Barthélemy, 2003). Barthélemy (2003) argue that it would be a mistake for the client firm if it chose a vendor only because of receiving the lowest bid from that vendor. A successful vendor should be determined based on not only hard qualifications such as providing low-cost and state-of-the-art solutions, or having business experience and financial strength, but also soft qualifications comprising trustworthiness, a good cultural fit, flexibility, and a commitment to continuous improvement or to long-term relationships (Barthélemy, 2003). Additionally, Barthélemy (2003) proposed some useful techniques the client firm could apply to spot the best vendors who obtained above criteria. Specifically, the company should spend a proper period of time in cooperating with a large number of suppliers in commodity activities before applying outsourcing. This would lead to higher possibility of knowing the best providers. In addition, making reference to clients of potential vendors and industry experts also proved to be a useful technique.

Another outsourcing error was writing a poor contract that contained an imbalance of power between the client and the vendor and created possibility for the vendor to get out of their commitments to short-term goals. A poor contract may be the result of spending too little time in negotiating the contract among partners. From that, Barthelemy (2003) suggested that a good contract should have five following remarkable features simultaneously: Precise (for cost and performance requirements), Complete, Incentive based, Balanced, and Flexible.

Inefficient management of personnel issues was the next outsourcing error. This error might lead to a decrease in productivity and/or dysfunctional actions from employees like strike. As opinion of Barthelemy (2003), two personnel issues needed to be under consideration to the client firm were how to continue key employees in their posts and motivate them in a new human resource system (outsourcing model), as well as how to secure the commitment of laborers transferred to the vendor. In order to manage these issues, the client company should offer key employees higher salaries and benefits together with necessary training and ongoing support to learn about new skills. Moreover, open communication should be established so that transferred laborers can know more about their situations, opportunities, or challenges in the vendor's business environment. And the most important thing was that the firm contemplating outsourcing needs to take ethical considerations before making any related decisions (Barthelemy, 2003).

Barthelemy (2003) also suggested losing control over the outsourced activity to be one of outsourcing error that can be caused by not having enough capabilities to manage the vendor or managing the vendor passively. In order to avoid this type of error, the outsourcing client needs to develop not only vendor management skills but also technical skills because it would be really necessary for the client in creating a good enforcement mechanism based on these skills to guarantee the strategy of outsourced activities in alignment with its overall corporate strategy (Barthelemy, 2003).

The sixth outsourcing error was paying no attention to hidden costs of outsourcing although these costs were proved to affect outsourcing decisions and the outcome of outsourcing efforts. Outsourcing hidden costs consist of outsourcing vendor search and contracting costs that the client firm needs to incur before carrying out outsourcing operations, as well as outsourcing vendor management costs incurred during the periods when outsourcing operations are conducted (Barthelemy, 2003). Therefore, these hidden costs of outsourcing should be realized and noticed when mentioning on outsourcing activities.

Lastly, one of seven outsourcing errors was the impossibility of planning an exit strategy because there were not reversibility clauses comprising material reversibility clauses and human reversibility ones in signed outsourcing contracts. This might result in difficulties for managers in switching the vendor or reintegrating the outsourced activity when this outsourced activity showed its failures. Thus, managers should anticipate what will happen when an outsourcing relationship ends to add reversibility clauses to the contract from the beginning (Barthelemy, 2003).

## **5. Risks, Challenges, and Potential Solutions to Offshore Outsourcing**

Herath & Kishore (2009) identified different types of risks related to offshore outsourcing in information technology (IT) operations (Table 2) that seem to be still suitable for offshore outsourcing in manufacturing and service industries.

Table 2 shows that these risks can be gathered into four groups corresponding with four categories of challenge from a client's view: *Strategic Decision Challenges*, *Vendor Selection Challenges*, *Vendor Management Challenges*, and *Technology Challenges*. In the meanwhile, Herath & Kishore (2009) summarized solutions suggested in previous literature to overcome these challenges.

Table 2: Risks, challenges and solutions to outsourcing

Risks	Challenges Posed		Solutions
<ul style="list-style-type: none"> <li>- Knowledge hoarding</li> <li>- Loss of intellectual property</li> <li>- Loss of internal know-how</li> <li>- Loss of core group</li> <li>- Loss of core competency</li> <li>- Loss of competitive edge</li> </ul>	<ul style="list-style-type: none"> <li>- Which IT functions should be outsourced</li> <li>- What is the right proportion of each outsourced IT function</li> </ul>	Strategic Decision Making	<ul style="list-style-type: none"> <li>- Choose disaggregated service activities</li> <li>- Vertical and Horizontal Chunkification</li> </ul>
<ul style="list-style-type: none"> <li>- Discrepancy between what is negotiated and what is delivered</li> <li>- Cost escalation</li> <li>- Legacy technology provided by vendors</li> <li>- Operational risks due to vendor locations</li> <li>- Risks due to geographic separation, cultural gap, legal systems' differences</li> </ul>	<ul style="list-style-type: none"> <li>- Selecting an appropriate vendor (with experience in assessing the scope of the project, with up-to-date technology skills and with cultural and organizational adaptability)</li> </ul>	Vendor Selection	<ul style="list-style-type: none"> <li>- Multi-criteria decision making tools for vendor evaluation</li> <li>- Vendor with cultural and organizational fit</li> </ul>
<ul style="list-style-type: none"> <li>- Deliberate under-performance by vendor</li> <li>- Reverse engineering of critical business processes, stealing and/or using proprietary information for secondary purposes</li> <li>- Lock-in situations</li> <li>- Loss of bargaining power leading to disputes and litigations</li> </ul>	<ul style="list-style-type: none"> <li>- What type of contract to choose</li> <li>- How long the contract should be</li> <li>- How to manage the vendor relationships</li> </ul>	Vendor Management	<ul style="list-style-type: none"> <li>- Contract type based on the need of the firm and expectations of outcome</li> <li>- Evaluate portfolio of controls</li> <li>- Balanced score card approach for performance measurement</li> </ul>
<ul style="list-style-type: none"> <li>- Antiquated communication infrastructure</li> <li>- Complexity in codes</li> <li>- Conflicting standards</li> <li>- Poorly articulated requirements</li> <li>- Incompatible development tools</li> </ul>	<ul style="list-style-type: none"> <li>- To have enough control and understanding of the technologies used</li> </ul>	Technology	<ul style="list-style-type: none"> <li>- Set up joint client-vendor teams</li> <li>- Understanding technological offerings from different vendors</li> <li>- Maintain a technology assessment capability</li> </ul>

Source: Herath & Kishore, (2009)

According to Herath & Kishore (2009), the first type of challenge in the IT offshore outsourcing contexts is *Strategic Decision Making Challenges*. In order to reduce risks such as loss of intellectual property, of intellectual property, of internal know-how, of core group, of core competency, of competitive edge, and risk of knowledge hoarding, the clients face *strategic decision making challenges* with decisions on which IT applications should be outsourced and what the right percentage of each IT function should be. From that, these authors emphasized on choosing disaggregated service activities based on six criteria as suggestion of Apte & Mason (1995) or applying vertical and horizontal chunkification that was proposed by Aron et al. (2005).

The second type of challenge is *Vendor Selection Challenges* (Table 2). Facing risks of IT offshore outsourcing such as discrepancy between results negotiated at the beginning and real results delivered, cost escalation, legacy technology provided by vendors, operational risks due to vendor, or risks due to geographic separation, cultural gap and legal systems' differences, outsourcing client companies need to select an appropriate vendor (Herath & Kishore, 2009). This can be supported by decision making tools based on multiple criteria like performance, technical expertise, commitment, quality or cost (Akomode et al., 1998). In addition, a cultural fit as well as sector and domain knowledge and experience from the vendor also should be paid attention (Willcocks et al., 2004).

*Vendor Management* is the next challenge (Table 2). Table 2 shows that it is extremely important for outsourcing client firms to determine which type of contract to choose such as minimal, selective or

comprehensive outsourcing, the period of chosen contracts (short-term, medium-term, or long-term), and ways to manage vendor relationships efficiently. Lee et al. (2004) proposed that selecting type of contract should depend on the needs of the corporation and expectations of outcome (strategic competence, cost efficiency, or technology catalysis). Additionally, in order to manage vendor relationships, portfolio of controls consisting of control of outcomes together with behavior control should be evaluated (Choudhury & Sabherwal, 2003), and client firms could apply balanced score card approach for performance measurement (Herath & Kishore, 2009).

Finally, Herath & Kishore (2009) suggested *Technology challenges* to overcome technological risks of IT outsourcing. Antiquated communication infrastructure, complexity in codes, conflicting standards, poorly articulated requirements, or incompatible development tools are examples of technological risks. Herath & Kishore (2009) realized that in some cases, setting up joint client-vendor teams is a favorite solution to technology challenges for vendors in order to achieve economies of scale. However, the important solutions are that the client needs to understand deeply technological offerings from various vendors as well as maintain a technology assessment capability to each vendor. In terms of solutions to avoid risks and respond to challenges of outsourcing activities, the role of performance measures and metrics (PMMs) in outsourcing decisions was put emphasis on in the research of Gunasekaran et al. (2015). These authors listed all PMMs in two types of outsourcing decisions (*strategic* and *tactical* outsourcing engagement decisions) at the pre-outsourcing, during-outsourcing, and post-outsourcing stages according to both financial and non-financial aspects, as well as both tangibles and intangibles (Table 3). The authors noticed that selecting and deploying appropriate PMMs may depend on business objectives, risks, agendas and requirements of stakeholders, and costs in measuring these PMMs. One noticeable thing was that organizations need to use a robust data collection and analysis system along with investing heavily in infrastructure and human resources to utilize these PMMs effectively.

Table 3: Performance measures and metrics (PMMs) in outsourcing decisions

Type of PMMs	Strategic outsourcing engagement decisions		Tactical outsourcing engagement decisions	
	Tangibles	Intangibles	Tangibles	Intangibles
<b>Pre-outsourcing stage</b>				
<b>Financial</b>	Total supply chain management cost, sales, return on asset, return on equity, return on sales, return on investment, client and supplier investments, transaction costs, supplier related costs, profitability, productivity, IT productivity, cost of sharing and cost of running, market volatility	Financial strength, research and development	Manufacturing costs, distribution costs, costs of negotiation, costs of monitoring and supervising external contractual parties, cost of performance reduction, client investment, supplier investment, profitability of bought volume, cost adherence, transaction costs, price, productivity, distribution cost, inventory cost, set-up cost, cost of defective parts, shortage cost, material handling cost	Cost of process and production innovation
<b>Non-Financial</b>	Production facility, procurement facility, location, commonality of products, market uncertainty, requirements' uncertainty, customer service level, productivity, quality, reliability, speed to market, access to outside skills and experience, degree of expertise, responsiveness, flexibility, safety and environment, time to design and produce new products, customer	Brand, industrial and cultural environment, goodwill, opportunistic behavior, intellectual property law, inter-organizational relationships, loss of local and tacit knowledge, innovativeness, social exchange, competitor orientation, organizational ability, opportunities, alignment of capacity and needs,	Rate of stock-outs, fill rate, order fulfilment time, information accuracy, information timeliness, delivery performance, design revision time, prototyping time and level of technology, support in process design and engineering, project quality, precision of the contract, involvement in design, volume of jobs to be outsourced, production plan, property rights, number of contracts, partnership	Core competencies, manufacturer-3PL relationships, market opportunities, collaboration, employment effect, trust, information technical capability, sharing, communication quality, process/product innovation, sharing knowledge, teamwork, cooperation, intellectual capital, vendor/client trust, degree of

	satisfaction, environment stability, value difference to quantity, risk of losing organizational competencies, alliances' risk perspectives, extent of substitution, firm size	morale problems, loss of management control, knowledge capital, knowledge acquisition, efficient governance, strategic alliance, core competencies, cultural conflict, reputation, degree of control and trust	quality, security issues, product functionality, market leadership, customer service level, commitment, customer satisfaction, scalability	expertise, goal setting and cultural blending, outsourcing effectiveness, formalizing sourcing process, information sharing, technical and managerial capability, access to new technology/skills, grow in-house expertise, responsiveness, enhance position in value chain, vendor selection capability, motivation of employees on the shop floor, loss of control
<b>During-outsourcing stage</b>				
<b>Financial</b>	Profitability, higher transaction costs, supplier-related costs, sales growth, cost reduction	Financial strength	Cost of monitoring and supervising external contractual parties, cost of poor scheduling and control, cost of poor quality components and parts, cost of defective parts, shortage or products cost, productivity, material handling cost	Cost and benefit of employee motivation and teamwork, cost and benefit of employee morale, cost and benefit of poor training and motivation, hidden idle-time cost of employees, lost capacity
<b>Non-Financial</b>	IT infrastructure, rate of sales of new products, service performance, inventory turns, number of new products launched, long-term partnership contracts, access to outside skills and experience, alliances' risk perspectives, commitment, quality of service	Environmental dynamism, knowledge and know-how, contract control, environmental heterogeneity, inter-organizational relationship, innovation, social exchange, ease of working, market conditions, competitor orientation, cultural conflict, trust, knowledge management and acquisition	Rate of stock-outs, safety stock level, capacity planning and resource allocation, lead-time, cycle time, handling of exceptions, scheduling flexibility, component standardization, differentiation, real-time monitoring, production process control, customer satisfaction, human capital, project quality, partnership quality	Collaboration, employment effect, trust, information technical capability, information sharing, communication quality, process/product innovation, sharing knowledge, technological integration capability, buyer-supplier interaction, teamwork, cooperation, motivation of employees on the shop floor, relationship with supplier, intellectual value, management capability, skills shared
<b>Post-outsourcing stage</b>				
<b>Financial</b>	Cost efficiency, profitability, productivity, switching costs, adaptation costs	Complexity of governance structures	Cost efficiency, profitability, productivity, switching costs, adaptation costs, transaction costs, ROI	Client's control over the vendor, service performance
<b>Non-Financial</b>	Reliability, responsiveness, infrastructure, flexibility, market share, difficulty in vendor change, risk, loss of control over outsourcing process, loss of control over quality, loss of the ability to protect product and confidentiality	Skills and knowledge, vendor support, familiarity with outsourcing strategy, utilization of outsourcing strategy, trust, reputation, value of the outsourcing relationship, organizational communication, employee morale, political issues	Customer satisfaction, infrastructure, project quality, quality improvements (process and service delivery)	Information sharing, inter-firm adaptation, goal setting, learning experience, communication quality, cultural blending, operational integration, employee morale, employee motivation, teamwork, shared effort for operational improvement

Source: Gunasekaran et al., (2015)

## 6. Outsourcing market in Vietnam

Vietnam is one of attractive outsourcing destinations in the world (Table 1). From the early years of the 20<sup>th</sup> century until now, there have been several large corporations outsourcing to this country. Some huge International Business Companies operating in Vietnam are listed in Table 4. It can be seen from Table 4 that most of these offshore companies have their headquarters in the United States and Japan, and outsourcing activities mainly are in Electronics and Information Technology industry with famous organizations such as IBM, Intel, Microsoft, Samsung, Sony, Panasonic, or LG Electronics.

Table 4: Lists of some large corporations that has outsourced to Vietnam

Organization	Headquarters
IBM	United States
Intel	United States
AMDOCS	United States
BOEING	United States
MICROSOFT	United States
Hewlett-Packard	United States
AVAYA	United States
Computer Sciences Corporation	United States
CISCO Systems	United States
Electronic Arts	United States
ShoreTel	United States
Xerox	United States
Mitsubishi	Japan
HITACHI	Japan
NEC	Japan
TOSHIBA	Japan
NTT	Japan
SHARP	Japan
Panasonic	Japan
SONY	Japan
Deutsche Bank	Germany
Alcatel – Lucent	France
Samsung	Korea
LG Electronics	Korea

Source: Based on TMA Solutions, (2015)

Vietnam has gained considerable advantages to become an attractive outsourcing market. Nahar & Kuivanen (2010) suggested four main advantages of Vietnamese outsourcing market including *low costs, abundant young, to some extent well-educated, hardworking and loyal workforce, strong government support, and stable political, social and economical development*. These advantages were also admitted by CEOs from offshore companies. For instance, in 2008 when Mitsubishi Heavy Industries (MHI) announced plans to set up MHI Aerospace Vietnam Co., Ltd. (MHIVA) in Hanoi, Vietnam, the company explained that it believed in effectiveness of production activities in a Japanese-affiliated industrial park (Thang Long Industrial Zone) with a good industrial infrastructure in Hanoi city. In addition, diligent labor force, robust economy, stable public security and the development of overseas transportation routes were other motivations for that decision (Interavia News, 2007). On October 2010, MHIVA completed the construction of a new factory producing passenger doors for the Boeing 777 in Hanoi (MHI news, 2014). This construction was considered as a part of MHI's outsourcing activities to enhance its competitive strength.

Besides, according to comments of Eric Stevens, a CEO of California-based Source Vietnam, owing to tax incentives and non-existent export duties on trade items, a large number of U.S. companies transferred their manufacturing processes from the United States and China to Vietnam. This CEO emphasized on tax incentives when Vietnam applied 0 percent taxes for outsourcing companies in the

first three years, and 50 percent discount on tax rates in the following five years. Also, other advantages of Vietnamese outsourcing market comprising low land costs, low import taxes on manufacturing assets, a strong, ethical and hard labor force were recognized to U.S. manufacturers (Martino, 2007).

Another research on outsourcing market in Vietnam is the research of Nahar & Kuivanen (2010). They argued that Vietnamese software outsourcing service producers gave Finish outsourcers big advantages to lessen costs and create valuable projects and products. The advantages were low labor costs, dynamic and flexible outsourcing service producers, growing IT market, a strong pool of IT employees, a culture with collectivism and loyalty, a stable and secure country, and many incentives and subsidies granted for the software industry by Vietnamese government. However, there were still some disadvantages in Vietnamese outsourcing market when most software companies in Vietnam were small and had little knowledge and international experience about markets and customers, the capacity for research and development (R&D) was limited, and the possibility of violating Intellectual property rights in this country was high. Thus, it was recommended that Vietnamese companies should continue to improve technical expertise, managerial skills, process capacity as well as international business practices, and Vietnamese government should add transparent, comprehensive and concrete policies related to this IT outsourcing industry (Nahar & Kuivanen, 2010).

## 7. Conclusion

The paper presented main characteristics of “outsourcing”. It can be concluded that the outsourcing model is usually applied by multinational firms, large service companies in deregulated industries, and public sector organizations for different purposes that can be financial reasons or strategic ones depending on which type of outsourcing decisions are, *tactical-level outsourcing* or *full-outsourcing* engagements. Among several reasons, reduction in costs seems to be one of the most vital motivations of outsourcing. Moreover, the paper finds that the most important things to a client firm are realizing major outsourcing errors, risks, as well as challenges of outsourcing activities, and knowing how to avoid these errors, to minimize risks and to overcome these challenges concerning strategic decision making, vendor selection, vendor management, and technology in various stages of outsourcing (*pre-outsourcing*, *during-outsourcing* and *post-outsourcing* stages).

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## The Impact of Internal Corporate Governance on Corporate Diversification with the Moderation of Free Cash Flow: The Case of Vietnam

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### Abstract

This research tries to explore the associations between internal corporate governance mechanisms and corporate diversification with the moderation of free cash flow in Viet Nam, a developing country. Internal corporate governance mechanisms are divided into two categories: interest alignment devices and control devices. Agency theory is considered as a basic theory to explain these relations.

Until now, there have been several different authors researching on the impact of corporate governance on diversification strategy such as Amihud and Lev (1981), Denis and others (1997), Collin and Bengtsson (2000), Singhand others (2004), Jiraporn and others (2006), Goranova and others (2007), Kim and Chen (2010), and Lien and Li (2013). However, Castaner and Kavadis (2013) seem to be the first researchers on this relationship with the moderation of free cash flow through developing the ideas of Jensen (1986) when Jensen (1986) realized the role of free cash flow as the availability of financial resources in creating opportunities for managers to fund non-value creating projects rather than projects serving shareholders' interests. The research of Castaner and Kavadis (2013) was conducted on a sample of 59 publicly traded corporations in France, a developed country. This is the main reason why this paper wishes to test how free cash flow moderates the corporate governance's effect on diversification in Viet Nam, a developing country, and find out whether there are any differences in comparison with the findings of Castaner and Kavadis (2013).

In addition, there is still no unification in results showing the relationships between corporate governance mechanisms and corporate diversification. For example, while Denis and others (1997) found the negative relationship between managerial ownership and diversification, the study of Kim and Chen (2010) supported the positive effect of managerial ownership on diversification. Therefore, this paper is hopefully to be a contribution to elucidate these associations that remain controversial until now.

The sample frame is listed firms on both stock market, Ho Chi Minh Stock Exchange (HOSE) and Ha Noi Stock Exchange (HNX), in Viet Nam. The data will be collected in the period from 2007 to 2014 because this period is the time when Enterprise Law No. 60/2005/QH11 was enacted and applied. This law was replaced by Enterprise Law No. 68/2014/QH13 that took effect from 01<sup>st</sup> July 2015. A panel data regression model is applied in order to analyze the data in the research.

### Keywords

Diversification, internal corporate governance, interest alignment device, control device, free cash flow, Vietnam

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## **Oil Price Variability, Exchange Rates, and Market Risk: A Vector Error Correction Study**

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### **Abstract**

Using panel data, this study investigates the short- and long-run dynamics between crude oil prices and the nominal US exchange rates for a selected group of oil-dependent economies. The countries' dependence on the price of oil is either because fiscal revenues are primarily reliant on oil exports or because industrial production is heavily dependent on oil. Exchange rates are calculated for the euro, Indian rupee, Russian ruble, and Nigerian naira. A measure of expected market risk is also included in a vector error correction model in which the direction of causality among the variables is examined. This type of analysis is used to determine the linkages between oil prices and the exchange rate of the currency in which oil is traded, namely, the US dollar. According to Muñoz and Dickey (2009), changes in the value of the US currency directly impact oil price simply because US dollar is the denominating currency. However it does not completely explain the inverse relationship observed in many studies between the two variables. This study is an attempt to fill this gap.

## Shrinking Labor Market as a Consequence of Transition Gap in Higher Education in Slovenia

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### Abstract

Deriving from systemization of types of universities, the authors are positioning the prevailing type of a Slovenian university. They prove that practically excluded from general transition process, Slovenian higher institutions are now not complying with international standards of modern post-secondary education. The gap is considerable especially if we consider the size of Slovenian economy and its companies' role in technology development. A typical insufficiency adjudged to higher education system not being in position to supply corresponding profiles and competencies for the economy, in Slovenia is amplified by poor choice of students to form their profile in the labor market. Although being compensated by graduates' readiness for certain mobility between professions the employers are constantly faced with inappropriate choice in the labor market, which impedes their competitiveness in open markets. This is demonstrated by paradox statistical facts showing at the same time surplus and deficit for the very same profession in the labor market and adds to the criticism of public spending for higher education in Slovenia. The authors point to needed reform measures for the higher education system in a small transition economy so as to comply with the companies' needs as well with the expectations of students.

### Keywords

Slovenian higher education, types of universities, transition and universities, labor market

## 1. Introduction

Measured through comparison with other OECD and European countries the data on unemployment rates of 25 – 34 year – olds with tertiary education are not favorable (all data OECD 2015). Here Slovenia is clearly positioned over OECD average by both genders and takes sixth position after struggling Greece, Spain, Italy, Portugal and Turkey. Especially unfavorable here is the position of female job – seekers in this cohort - reaching almost 15% mark. With under 70% of employed graduates, Slovenia is again positioned with the same group of countries under the OECD average (80%). When we, however, consider 25 – 64 year olds, Slovenia with 81% employed with bachelor degree is positioned exactly between OECD (82%) and EU (80%) level.

Slovenia belongs to the EU transition countries that are striving to reach the European average in the fields such as income level, value added, competitiveness and technology level of exports and the results do not support optimistic expectations.<sup>1</sup> Therefore, it is of special importance that in the era of shrinking markets, this country looks for internal reserves to try to compensate the gap.

A part of the gap that Slovenia cannot get rid of surely can be assigned to its traditional aversion towards imports of foreign capital<sup>2</sup>. Having this in mind, this paper tries to prove that there is one additional field, where Slovenia could really improve and try to compensate the consequences of shrinking markets, is the higher education system. The insight in this system in Slovenia disguises that this sector has been traditionally isolated from historical developments in the area as well as exempted from transition process. Although as shown below, higher education in developed countries has also been subject of change and uncertainty, the comparative analysis will show that the disproportions demonstrated by Slovenian higher education are essential and should be reduced. The thesis is that the graduates undergoing more modern higher education system would through their better competencies and skills help Slovenian companies rise their competitiveness and thus better handle the effects of shrinking markets.

As an example in this paper Slovenian public universities<sup>3</sup> are used, also due to the fact, that one of the authors has been holding different positions in the Slovenian higher education system. Through connection and communication with the universities in other countries of former Yugoslavia, authors could recognize quite some similar features also at public universities also there. Therefore, we hope that findings on university development gaps in Slovenia will be useful also for the readers in the area.

## 2. Applying the Classification of Types of Universities to Slovenian Universities

Classification of types of universities will here be used as a comparison tool to position the universities and higher education system in Slovenia in a historical perspective. This allows us to critically point to the areas of deficiencies in the present public higher educational system in Slovenia. The gaps in competencies will be with the help of historical comparative approach linked to arrears in development and reforms at Slovenian public universities. We consider the production of graduates,

<sup>1</sup> According to APPS (2016) in 2014 GDP per capita in Slovenia was 81% of the EU average. The gap in the field of value added per worker is essentially bigger: here Slovenia reaches only 60% of the EU average (GZS 2015). The competitiveness of Slovenia if compared with selected countries in 2015 (rank 49) was: Austria (26), Czech Republic (29), Estonia (31), Hungary (48), Italy (38), Poland (33) and Slovak Republic (46). Technology level of exports puts Slovenia well behind the EU average: in 2014 the share of low technology exports was 8.8% if compared with the EU (6.7%), with middle technology intensive production with 37.1% Slovenia exceeded even new EU members average (36.1%) and differs significantly from the EU average (30.1). With high technology exports (21.9%) Slovenia lags behind the EU average (26.2%) – all data UMAR (2016).

<sup>2</sup> In average in CE 4 countries (Czech Republic, Hungary, Poland and Slovakia) before financial and economic crisis the FDI flows grew at about 4.5% per year – in Slovenia this value did not even reach 1.0%. The FDI stock in CE4 countries has been 40% - 50%, while in Slovenia it has been less than 15% (IMF 2016).

<sup>3</sup> Typical share of students enrolled to public universities in Slovenia is 86% (SURS 2016).

which lays back to international standards as factors that additionally burden the companies with the competitiveness development and thus adds to shrinking of their markets.

In the literature, types of universities have been presented from different perspectives – from historical perspective and classification, over types of universities referring to their role in a modern society up to student guides explaining the nature of universities that may draw their attention. Hills (1995) systemizes universities from historical perspective in relation to their most typical features. Demeulemeester (2009) discusses the influence of motivation of stakeholders on universities development. Audretsch et al. (2016) discuss the role of universities in a modern social and economic environment. As a typical guide for students here we quote The Good Universities Guide (2016).

In this paper, we will use the classification as presented by Hills (1995), as it allows the best identification of the present features of Slovenian public universities with the features of different types of universities in historical perspective. According to the author from the historical perspective types of universities could be systemized as shown in the table 1 below:

*Table 1: Historical types of universities by Hills (1995)*

<p><b>NAPOLEONIC MODEL</b></p> <ul style="list-style-type: none"> <li>➤ State dominated</li> <li>➤ Grandes Ecoles</li> <li>➤ Ecoles Polytechniques</li> <li>➤ Training and education of administration elites</li> <li>➤ National</li> <li>➤ (Paris model)</li> </ul>	<p><b>HUMBOLDT MODEL</b></p> <ul style="list-style-type: none"> <li>➤ Subject dominated</li> <li>➤ Research dominated</li> <li>➤ Professor dominated</li> <li>➤ PhD important</li> <li>➤ International</li> <li>➤ Know-what</li> </ul>
<p><b>ENGLISH, OXFORD MODEL</b></p> <ul style="list-style-type: none"> <li>➤ Student centred</li> <li>➤ Elitist</li> <li>➤ Small colleges</li> <li>➤ Whole persons</li> <li>➤ Personal relationships</li> <li>➤ Tutors</li> <li>➤ (Bologna model)</li> </ul>	<p><b>SCOTTISH-AMERICAN MODEL</b></p> <ul style="list-style-type: none"> <li>➤ Utilitarian</li> <li>➤ Market driven</li> <li>➤ Industry focussed</li> <li>➤ Emphasis on independence, innovation and technology transfer</li> <li>➤ Non-elitist, pluralistic</li> <li>➤ Know-how</li> </ul>

There are several facts that allow the statement that prevailing type of Slovenian public university demonstrates most characteristics of outdated Napoleonic and Humboldt models, none from elitist Oxford model and quite few from utilitarian Scottish-American model. Here are some facts that underline such statement.

As similarities to Napoleonic model the following features of Slovenian public universities can be quoted:

- State domination – the state and respectively corresponding ministry of education and science defines most financial parameters on financing of universities and programmes and partly also enrolment quotas;
- Grandes ecoles – Slovenian public universities consist of programme units called faculties. They are partly financially independent from the university and almost entirely independent when programmes are concerned. Therefore, it is nothing special if one finds chairs or (although small) departments of law or business at faculties outside those disciplines – e.g. technology, pedagogic science and so on. Students can opt between study directions at the faculty they have enrolled to, also choosing among limited number of courses. In some fields independent faculties agreed to offer joint degree with limited choice and connecting two to highly three faculties. Therefore, students are very limited to choose the course offered within

the university they would prefer if it were not accidentally included in the programme they are enrolled in.

- Training and education of administration elites – the data of unemployed graduates in Slovenia shows the overhang of graduates in economics and business with the university degree. So in 2013 833 job seekers of this profile were faced with 230 open positions (Morfejork, 2016). However, at the same time the employers seeking for selling representatives have been complaining that they cannot fill open positions due to insufficient supply (Moja zaposlitev, 2014). This clearly shows that the graduates of business and economics are awaiting general (state) jobs dealing with their study, but are in the same time not considering selling skills to be among the competencies they should command when entering the labor market.
- National – the strongest proof for this characteristic of Slovenian higher education system is the faculty recruitment system. First, the candidates to teach at the Bologna graduate level must obtain the professor title (assistant, associated, full). Disregarding of his achievements an internationally acknowledged teacher cannot be formally included in the programme if he (she) cannot prove the compliance with the election criteria valid in the Slovenian higher education system. Second, typical for Slovenian faculty recruitment is “intellectual in-breeding”. It is quite normal that a person elected as a full professor at certain faculty (programme) did his bachelor degree, master degree, Ph.D degree and is being promoted from the level as assistant until he reaches the full professor (tenure) title at the very same university – e.g. faculty. Third, the Law on higher education still in power prevents courses or programmes to be taught in English unless the same programme is available also in Slovenian language.

The Humboldt type of university is highly prized in Slovenia and the programmes (faculties) who hold themselves as top quality institutions, like to promote themselves through characteristics of this model. Similar features are:

- Subject dominated – unlike typical modern approach to course formation according to the needs and interests of students, prevailing is the model of untouchable disciplines that are compulsory part of the programme regardless the competencies that they may provide.
- Research dominated – apart from being an important feature when ensuring the growth of young universities, especially with the promotion to higher professor titles their research performance plays a decisive role. It is valued strictly according to bibliographic criteria and often have only poor connection with teaching.
- Professor dominated – Academic freedom of professors does not refer only to the field of their research but often also means impersonation of the course they teach. There are no functioning mechanisms to force a teacher to innovate their courses or to adjust its content to the modern teaching standards. The student polls are however, gaining on their importance, which refers to their accessibility for interested public, but are seldom used as a mean of promotion or degradation of professors.
- Ph.D. important – the Ph.D. is the necessary condition to follow the path of the professor title. Therefore, it is not possible for the practitioners to perform independently as lecturers in the courses<sup>4</sup>.

There are almost no similarities that could be assigned to the Slovenian public universities referring to two remaining models in the Table 1. Due to the fact that almost 50% of present generation has enrolled to the higher education institutions in 2015, no matter how they strive for elitism, also best

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<sup>4</sup> Trying to cope with this deficiency one of the authors when still at public university introduced the title of a “guest expert” and at his present Business School the title of “guest lecturer”. In this way, business practitioners can be introduced fully into the lectures, but must be accompanied with a teacher with corresponding title. The additional cost for the university is avoided through the readiness of the practitioners to perform their teaching free of charge.

Slovenian universities are subject to non-elitist approach which in the Table 1 above is assigned to Scottish-American model.

However, one should draw the attention of the developers of Slovenian universities to a feature that could be found in the same model. Here we mean the adjective “Utilitarian”. It is not only Slovenia, who will have to reconsider the mission of higher education amid universities. With shares of generation enrolled in the higher education in developed countries of over 40%, one cannot anymore persist on the elitist approach over the whole cohort. Especially in a small open economy like Slovenia (the same is valid for the states in the region) it is a matter of rational cognition to realize that great part of the generation in the tertiary education could be better served by using the vocational approach than being subject to selection and included in a rigorous studies path.

### 3. Slovenian Universities as the “Winners” Of Transition in Slovenia

The present situation at public universities in Slovenia is a consequence of three main facts related to historical development and the path of transition that was chosen by Slovenia. They are:

- Slovenia has been geographically dislocated from centres of social, democratic, science and technology development in the past. This also contributed to the environment, which inclines to non-merit privileges.
- For 45 years (1945 – 1990) the stakeholders in the higher education (teachers and students) were controlled and trimmed to support the communist party line in exchange to special position in society (salaries, non-transparent financing, student social nets and privileges).
- Apart from arrears in privatization, gradual and half-hearted reforms left out the universities from reform attempts. Leaving aside the programme changes, which would fund the path towards full-fledged democratic market economy, this cemented public universities as untouchable structure of the Slovenian society<sup>5</sup>.

In this sense not being obliged for restructuring to support social needs, Slovenian public universities may be considered “winners” of transition. This very short-sighted tactics will, however, lead to deeper changes. They, as we know, are prone to cause unwanted costs such as limiting the role and financing of basic sciences not directly defensible by economic and business reasons especially in the field of arts and humanities.

### 4. The Choice of Investors on the Knowledge Market

On every market, basic economic principles are valid – do we want it or not. Acting sometimes similarly to the laws of physics the markets must often be restricted to prevent them for causing possible negative external effects. Being an element of human nature, the patterns of human reactions to economic incentives pose the limits to collective action when limiting, controlling or even excluding the markets. As a rule in the area concerned, they will appear in some other form, which may be socially less appropriate than the form we wanted to prevent.

In the higher education market in Slovenia the supplier role has been predominantly assigned to public universities. There is also private (mostly business schools) offer, which attracts about 14% students in a generation (SURS 2016). This part of market we will exclude from our analysis, although it is apart from easier (payable) access compensating programme inflexibility of public faculties in the field.

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<sup>5</sup> After disclosure of illegal honorary fees and other payments to individual deans and professors by the application »Supervisor« in 2015 and in 2016 the scandals were relativized by academia and eventually vanished from the media. The University of Ljubljana even brought the editor of the data to the court.

High importance of diploma together with the position that public universities retained in the area of education lead to monopoly position. Therefore, although taking responsibility for the consequence that they will bear when entering the labor market, students and their financiers have very limited choice in the higher education market. As stressed in the former chapter this is demonstrated through still predominant Napoleonic type of public higher education system.

The response of the demand for education is offset in the data of enrolment to public universities and also includes of course reduction of generation due to demographic developments. Although when affordable, parents tend to enroll their children to universities abroad – enabling better choice of the profile following the labor market demand. Despite this fact, the universities were not urged to reforms to leave old-fashioned models as described above. In addition, the finance assigned to the public universities has been hardly reduced<sup>6</sup>. This a consequence of relatively strong position that the interest groups related to public universities hold in the Slovenian society. With their demands, they are putting forth the negative consequences that accountability would cause for national development. In this way disguised remain the facts causing financial stress such as: unproportional growth of the faculty, its promotion in higher titles and emerging of new faculties through disintegration of the former ones causing higher administrative costs.

### **5. Which Type of University would be Most Appropriate for a Small Transition Economy?**

The developments in the relation between higher education and labor markets can be considered rather critical. Taking over some once indispensable human skills, technology is taking over also operations for which once specialist education was needed (programming, design, control...). This makes professions even in some technical area abundant and is through hard facts proving the rise of professions dealing with human wellbeing such as services, free time activities, culture... According to Spicer (2016), while 40% of American young generation in 2010 studied for degrees, only 20% of jobs required a bachelor's degree. Another 70% required either a high-school education or not even any post-elementary education at all.

As much more striking example here serves India. As from *Aspiring Minds* (2016) 80% of engineering graduates from Indian universities are unemployable due to the lack of the competencies needed for a job. Even worse are results for graduates from business schools – according to ASSOCHAM (2016) survey on B and C category business schools in India. When one excludes 20 top business schools, only 7 per cent of MBA graduates get a job immediately after graduation. As the reason for such situation, the analysts quote typical reasons such as fast growth of enrollment in last years, which followed growth of demand on the knowledge market. Here typically again the quality control, infrastructure and faculty could not follow such growth of business school seats.

Most small transition economies in Europe were faced with excessive growth of higher education schools and universities, very often exposing shallow expertise and poor performance. When looking for the path that could be useful for them, they should by all means consider two types of universities, which should have different missions. With the share of young population looking for seats in the higher education of about 40% it is clear that although using its' name all institutions will not be able to act as a traditional university. Here we mean strong research orientation with incorporated research institutes and rigorous student recruitment system. We believe that majority of higher education

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<sup>6</sup> As for SURS (2016a) the numbers of students enrolling to public universities were: 85.889 (2012), 80.647 (2013), 74 411 (2014) and 69.721 (2015). On the other hand despite the fact that Slovenia was in these years faced with crisis in the same period financial support for public universities according to the stabilization programme had been reduced at about 1% per year (Uradni list RS 2016). This means that reduction of almost 19% of students was met with reduction in finance of about 3%.

institutions would do the best for their environment to follow the features of an utilitarian university. In Slovenia this would, however, bring political turmoil in the sphere as for the biggest part of institutions frame conditions would very much change. Universities brought in the cluster of utilitarian higher education institutions would then face transition such as more teaching obligations for professors, direct responsibility for graduates' competencies and especially in the field of financing. Next step would namely be reloading a part of financial responsibility to the universities in the form of student fees, private **grants to universities** and procurement contracts with **private** industry.

## 6. Concluding Remarks

Recent trends in higher education positioning in society have been opening many new perspectives and directions how the present system should turn. As shown above from the perspective of recent developments in labor markets it is also no more possible to discuss the higher education institutions' mission without including other (especially secondary) levels of education. The authors tried to avoid entering these discussions because they did not possess the needed expertise. Basing on their insight in the functioning of the Slovenian public higher education they, however, believe that realizing the gaps between established systems in Slovenia and in developed countries, could be a good orientation for the reforms needed.

The universities in Slovenia should realize that the economy "out there" has almost daily to follow the changes, to adapt and try to find new ways for progress or even to stay in the markets. In the environment of shrinking markets, higher competitiveness based on graduates with corresponding competencies would surely ease their looking into the future.

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## Assessing the Quality of Non-financial Reporting in Croatia

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### **Abstract**

Research question in focus of this paper was “Is the quality of presented non-financial information in sustainability reports of Croatian companies in accordance with the provisions of Directive 2014/95/EU?” Since EC requires that the Directive on non-financial reporting is adopted and incorporated into the CAA as a legal framework for the business year 2017, a research was done on non-financial reports on a sample of Croatian companies registering 400 and more employees, exploring the real potential for complying with the Directive. Given that only 20.65% of the sampled companies are disclosing non-financial information, the quality of environmental (average score 4.82 out of 9) and social (average score 3.74 out of 9) information is quite low (information quality was measured by means of accounting attributes of usefulness of information - relevance, comparability, verifiability, and clarity), and the overall quality of presented non-financial information was also rather low (overall average score 17.97 out of 45), there is undeniably a need for significant improvements in order to fully comply with the Directive.

### **Keywords**

Directive 2014/95/EU, GRI, non-financial information, quality of sustainability reporting

## 1. Introduction

Non-financial reporting is becoming mandatory in ever growing number of countries worldwide. With issuing the Directive 2014/95/EU on disclosure of non-financial and diversity information in 2014, European Commission requires of the EU Member States to enact national law for obligatory non-financial reporting by the end of 2016 for all big companies with more than 500 employees. This means that all large companies are to track non-financial and diversity information during 2017, suggesting that non-financial reports are to be available at the beginning of 2018. The aim of this paper is to assess the quality of non-financial information presented in sustainability report of Croatian companies, and the possibilities of implementing the provisions of EU-directive and the renewed EU Strategy for corporate social responsibility (EC, n.d.), in accordance with the methodological framework of GRI standards, taking into account the needs of internal and external users for such information.

## 2. Theoretical Background

Quality of non-financial information presented in external and internal reports (sustainability reports, annual report, environmental report, social responsibility report, corporate responsibility report, integrated report, segment report, etc.) can be evaluated by means of standard's framework (GRI, UN Global Compact's requirements, ISO 14001, EMAS, etc.) and regulations, supported by the relevant theoretical background. Non-financial reporting has been evolving through stages since 1970s. The first stage is associated with presenting environmental information, followed by the stages of presenting social information and combination of environmental, social and economic information. The next stage of development was assurance of non-financial reports, pointing a future need of providing benchmarking performance (Fifka, 2012; Herrmans & Herschovis, 2010, p. 21).

Since there are countless standards and guidelines for disclosing non-financial information (Choi, 2003; Perrini, 2005, p. 614), there is a problem in choosing relevant starting points in assessing the achieved level of quality of information presented. The quality of presented non-financial information in companies' reports has been the subject of research of many authors, attempting to determine the reliability and usefulness of such information (Chauvey, Giordano-Spring, Cho & Patten, 2015; Freundlieb, Gräuler & Teuteberg, 2014; Hąbek & Wolniak, 2015). The emphasis of their researches is on defining and measuring qualitative characteristics, predominantly in the context of the provisions of FASB and IASB, as internationally recognized accounting bodies (Freundlieb et al., 2014).

The intention is to disclose non-financial information in the same way in which financial information is disclosed in financial statements today, which are grounded in fundamental qualitative characteristics, such as relevance and faithful representation (EY, 2010, p. 2; FASB, 2010, p. 16; IASB, 2015, p. 27), as well as comparability, verifiability, timeliness, understandability (FASB, 2010, p. 19 and 16; IASB, 2015, p. 30). These qualitative characteristics of financial statements seem to be a corner-stone in developing non-financial reporting in presenting environmental and social information (Freundlieb et al., 2014, p. 26-27; GISR, 2015, p. 8-21; GRI, 2014b, p. 13-16; Hąbek & Wolniak, 2015).

Sustainability reporting guideline Global Reporting Initiative (GRI) is of particular importance for disclosing non-financial information, because it provides reporting principles (GRI, 2014a, p. 16-18) that are divided into two groups of tasks: first, principles related to the report content (stakeholder inclusiveness, sustainability context, materiality), and second, principles related to the quality of reports (balance, comparability, accuracy, timeliness, clarity, reliability). Although numerous companies in different countries present non-financial information, this area is still inadequately recognized by regulations, meaning that non-financial reports are mostly voluntary based (SSEI). A significantly improvement of non-financial reporting quality is expected throughout the EU countries, following the provisions of Directive 2014/95/EU.

It is also suitable to apply the achievements of the EMAS (EPA, 1995; Fifka, 2012, p. 66; Hahn & Kühnen, 2013, p. 5; IFAC, 2005, p. 30-55; Mathews, 1997, p. 483; Ortas & Moneva, 2011, p. 19), because these environmental indicators are a underpinnings for external environmental audit, allowing comparison against other companies operating in the same industry (Herrmans & Herschovis, 2010, p. 21), which is convenient to apply to other non-financial information (EC, 2014, para. 16) presented in sustainability reports. This research will pursue methodological framework presented in several studies focused on the quality and usefulness of non-financial information presented in sustainability reports (Chauvey et al., 2015; Hąbek & Wolniak, 2015; Persic, Jankovic, & Vlasic, 2015), with particular emphasis on methodological framework and the results of a research conducted in France on a sample of companies that were listed on the French SBF (Chauvey et al., 2015, p. 794-795).

### 3. The Research Framework, Methodology, Results and Discussion

Pursuant to provision of Directive 2014/95/EU a research was carried out on a sample of Croatian companies that have had 400 and more employees registered in 2014. The assumption was that by 2018 (until then the Directive is to be adopted) these companies might have 500 or more employees, thus becoming obliged to present non-financial information in theirs reports. The sample companies (with 400 and more employees) were retrieved from Croatian Company Directory (CCD) website provided by Croatian Chamber of Economy (Croatian Chamber of Economy, n.d.); their websites were searched for available reports disclosing non-financial information, commonly referred to as sustainability, social and/or environmental report, presented either in a form of stand-alone report or annual (financial) reports. If no such reports were found, further research was done by predefined key-word phrases via Google search, and downloaded from the company websites. Sustainability reports were collected in December 2015 for the reporting year 2014.

#### 3.1. The research framework and sample characteristic

The list of the companies retrieved was divided into 2 major groups. The first group was composed of large, medium and small companies (classification based on provision of CAA, 2015) registering 500 and more employees (500+) in 2014, while the second group was composed of companies registering between 400 and 500 employees in 2014 as show in the table below.

*Table 1: Croatian companies with 400 and more employees (authors processing)*

Size of Croatian companies (number of employees)	Number of Croatian companies retrieved	Number of Croatian companies reporting (merged with the group)	Number of Croatian companies retrieved
500	172	142	37
400 – 499	49	42	1
<b>TOTAL</b>	<b>221</b>	<b>184</b>	<b>38</b>

Since many of the Croatian companies were members of a business group being repeated in both size-groups, the final number of reports available for research (content analysis) was 38. These reports were analyzed according to the GRI 4 methodological framework and guidelines, which were chosen as globally accepted reporting guidelines. The focus is to identify the presence of categories and sub-categories (GRI 2014a; GRI 2014b) in the sustainability reports, as presented in the table below.

Table 2: GRI framework of categories and sub-categories relevant for presenting information in the sustainability report (GRI, 2014a, p. 64, 2014b, pp. 84, 143, 173, 198, 221)

Categories / Sub-Categories	Clarification	Examples (GRI aspects)
Environment (EN)	Organization's impact on living and non-living natural systems, related to inputs (e.g. energy, water) and outputs (e.g. emissions, effluents, waste).	Materials, energy, water, biodiversity, emissions, effluents and waste, products and services, compliance, transport, overall, supplier environmental assessment, environmental grievance mechanisms
Social - Labor practice and decent work (LA)	Organization's impacts on the social systems within which it operates which include labor and decent work, human resources, society, and product.	Employment, labor/management relations, occupational health and safety, training and education, diversity and equal opportunity, equal remuneration for women and men, supplier assessment for labor practices, labor practices and grievance mechanisms
Social - Human rights (HR)		Investment, non-discrimination, freedom of association and collective bargaining, child labor, forced or compulsory labor, security practices, indigenous rights, assessment, supplier human rights assessment, human rights grievance mechanisms
Social - Society (SO)		Local communities, anti-corruption, public policy, anti-competitive behavior, compliance (SO), supplier assessment for impacts on society, grievance mechanisms for impacts on society
Social - Product responsibility (PR)		Customer health and safety, product and service labeling, marketing communications, customer privacy, compliance (PR),

Following the GRI guidelines' framework, the next step was to analyze the real presence of these categories (environmental - EN, social) and sub-categories (LA, HR, SO and PR) on the sample of all 38 sustainability reports disclosed by Croatian companies with more of 400 employees. Research results show that among 38 analyzed reports which present non-financial information, most of Croatian companies use environmental indicators (EN - 32), following labor practice (LA - 27), products responsibility (PR - 25), and lastly human rights (HR -24) and society (SO-24).

### 3.2. Methodological framework

A similar research done in France on a sample of companies listed on the French SBF (Chauvey et al., 2015, pp. 794–795) was used in creating a model for assessing the level of quality of non-financial information presented in sustainability reports of companies operating in Croatia retrieved from CCD. Special emphasis was on evaluation of relevance, comparability, verifiability, and clarity, as a main methodological framework relevant to this kind of research, as presented in the table below.

Table 3: Assessing the quality of disclosed information by attributes

Attribute	Measure	Expected finding
Relevance	Identification of stakeholders and their needs	List of stakeholders
	Dialog with stakeholders to define their needs	Reasons for including the presented stakeholders into the sustainability reports
	Analysis of risk factors specific to the company	Risks related to the environment and society
Comparability	Temporal features and comparisons with previous/next- period sustainability report	The framework of the sustainability report
	Comparison with previous/next- period sustainability report	Several reporting periods in a sample sustainability report (or possibility of comparing the presented information with the information presented in the sustainability report from the previous/upcoming reporting period)
	Clear definition of the report perimeter and boundaries	--
Verifiability	Verifiability of information presented	Different knowledgeable and independent observers could reach consensus that a particular depiction is a faithful representation.
Clarity	Clear definition of presented data and indicators	Exact indicators that are being monitored, measured and reported on
	Explanation about the methods of elaboration, calculation, and/or reporting mechanisms.	--

Source: authors processing based on Chauvey et al. 2015

A means for assessing the quality of disclosed information was formed by classifying identified information into the (sub)-categories formed according to the GRI 4, and then assessing the quality of those information through information quality attributes (relevance, comparability, verifiability, clarity), for each of which a measure was defined (table 3). Knowing that mere presence of information is not a guarantee their reliability and validity for making needed decisions, the attempt was to detect the presence of information from each of the sub-categories and then analyze its quality by identifying each of the attributes of the information presented, thus deepening an understanding of reliability and validity of presented sustainability information in presently available non-financial reports in Croatia. The assessment was done by awarding one point for the identified presence of each of the attributes in the five (sub)-categories, where in final matrix each cell amount represents a number of the sampled sustainability reports of Croatian companies, according to a framework of similar research (Chauvey et al., 2015, p. 798). An average score of information attributes ranged from 0 to 5, meaning that each of the information attribute was assessed throughout all predefined (sub)-categories, whereas an average score for each of the (sub)-categories ranged from 0 to 9, meaning that each of the presented (sub)-categories' information was assessed in depth through information attributes. This framework was applied due to its simplicity, taking into account that although present, non-financial reporting system in Croatia is still underdeveloped.

### 3.3. Research results and discussion

Research results are based on the selected sample and methodological framework for evaluating the quality of disclosed data by attributes and GRI sub-category, as presented in the table below, and each cell represents a number of sample firms which disclose information accordingly. An average score is calculated for (sub)-categories (final row) and for information attributes (final column). An average score of sub-categories ranged from 0 to 9, because 9 attributes are assessed for each sub-category, whereas attributes' average score ranged from 0 to 5 each attribute being assessed in all 5 sub-categories. The bottom right cell represents the mean of the overall sustainability information quality score, which could range from 0 to 45 points.

Table 4: Analysis results of the quality of non-financial information presented in sustainability reports of Croatian companies with 400 and more employees

Sub-categories // Attributes	Environment	Human rights	Labor practice	Community/ Society	Product responsibility	Average attributes score (range 0 – 5)
Relevance – Identification	20	23	23	22	23	2,92
Relevance – Dialogue	18	19	19	19	19	2,47
Relevance – Analysis	14	9	8	7	12	1,32
Comparability –Temporal	24	12	17	14	9	2,00
Comparability –Others	22	11	16	14	10	1,92
Comparability –Perimeters, Boundaries	19	11	15	10	11	1,74
Verifiability (of info presented)	26	13	17	15	12	2,18
Clarity – Definitions	28	16	18	17	13	2,42
Clarity - Methods	12	5	9	9	3	1,00
Average score categories (range 0 – 9) (range 0-45)	4,82	3,13	3,74	3,34	2,95	17,97

Source: authors processing based on (Chauvey et al., 2015, pp. 794–795; Deloitte, n.d.; FASB, 2010, p. 20)

The research results imply that quality of the presented information by **attribute** (range 0 to 5) reflects in **relevance**, suggesting that Croatian companies disclosing sustainability information are aware of the significance of this kind of information for decision making. Yet, the level at which sustainability information are presented is the level of recognition (average score 2.92) and with a quite limited dialogue with the stakeholders (average score 2.47 out of possible 5). **Clarity** came in as the next attribute of information-quality proved to be quite highly scored (average score 2.42), suggesting that there is awareness of clearly defining data that are to be reported on in non-financial reports.

**Verifiability** of the information disclosed has also been highly scored (average score 2.18), indicating that there is a tendency of disclosing data in sustainability reports that have been effectively tracked and transformed into information. **Comparability** of data/information presented in sustainability reports with data/information of previous/next-reporting period came in the middle on the information-quality scale (average score 2.00 and 1.92). Comparison with previous/next-period sustainability report revealed that many of the Croatian companies were still in search of the most suitable sustainability reporting frame and time period with a tendency of aligning sustainability reporting with the GRI guidelines

The information-quality-attributes with the lowest scores are comparability of **clear definitions** of the report perimeter and boundaries (average score 1.74), relevance of environmental and social **risk analysis** (average score 1.32) and explanation of the **methods** of elaboration, calculation and/or reporting mechanisms (average score 1.00). Thus, these results imply that sustainability issues are not in fact integrated into reporting system of Croatian companies as part of processes and procedures, and consequently tracking, elaborating, calculating and then reporting on the environmental and social information in accordance industry features. Analysis of the risks related with the companies' impact on environment and society is rarely present (average score 1.32) in sustainability reports, because most of the risks presented were related to the economic category. This suggests a very low awareness of management as to the existence of impacts that results from liaison between companies and the surrounding environment and society.

The sub-categories with the highest quality of information is the **environment** category (average score 4.82). The reason for this could lie with the fact that measures for the company's impact on the

environment have been well developed and long in force through a fairly new developed disciplines such as environmental accounting (EMAS, n.d.; EPA, 1995; Fifka, 2012, p. 66; Hahn & Kühnen, 2013, p. 5; IFAC, 2005, pp. 30–55; Mathews, 1997, p. 483; Ortas & Moneva, 2011, p. 19). Namely, it is easier to measure the environment category than those related to the society, because there are available many exact indicators that are suitable for both external and internal reporting. This substantiates the fact that all other sub-categories are below the average score of 4.0 (the score ranged from 0 to 9). According to the assessed quality of the information, in a descending order came information disclosed on **labor practices and decent work** (average score 3.74), community / **society** (average score: 3.34), **human rights** (average score: 3.13), **product** (average score: 2.95).

The average score of quality information imply that there is a growing awareness of a need to measure and report on labor practice and decent work information (or the human-resource-related information), as well as a need to interact with the surrounding society in a systematic and organized manner. The categories with the least average score for the information quality were human rights (average score: 3.13) and product responsibility (average score: 2.95). These scores could also point to a need of a system such as social accounting, that would be an equivalent of environmental accounting for social category in sustainability reporting (Mintz, 2011, p. 33). Interestingly enough, the mean informational quality of sustainability reports is 17.97 out of possible 45. This indicates that there is a considerable potential for improvement on sustainability reporting, especially when compared to the non-financial reporting databases such as CorporateRegister.com, where report assurance is preferred.

In order to improve, it is important to analytically assess the frequency of used sustainability indicators, considering the provision of GRI guidelines or other relevant non-financial reporting framework, such as SASB, OECD, ISO 14001, EMAS, etc. The following table presents the frequency of disclosed environmental and social information in 38 analyzed sustainability reports. Another focus of this research were the indicators presented by the GRI guidelines (coded with EN, LA, HR, SO, PR, Z / GRI - FP), as well as other indicators detected by management as important to measure, and as such can contribute to the quality of presented information (Z/ KPI). It is noteworthy that a need to measure information proposed by the GRI sector disclosures guidelines has been recognized in one report, thus showing a proactive and forward-looking management in the terms of sustainability.

*Table 5 : Environmental and social indicators reported by Croatian companies (authors processing)*

ENV indicators	EN sum	Percentage of reports with EN indicators	SOC indicators	SOC sum	Percentage of reports with SOC indicators
Energy	24	63,16%	LA - Occupational health and safety	19	50,00%
Emissions	21	55,26%	LA - Training and education	18	47,37%
Waste (and effluents)	20	52,63%	LA - Employment	17	44,74%
Water	18	47,37%	PR - Product and service labeling	10	26,32%
Materials	15	39,47%	HR - Non-discrimination	9	23,68%
Biodiversity	10	26,32%	LA - Diversity and equal opportunity	9	23,68%
Compliance - EN	9	23,68%	PR - Customer health and safety	9	23,68%
Products and services - EN	6	15,79%	SO - Anti-corruption	9	23,68%
Transport	5	13,16%	SO - Local communities	9	23,68%
Environmental grievance mechanisms	3	7,89%	HR - Freedom of association and collective bargaining	7	18,42%
Overall environment protection expenditure	3	7,89%	HR - Child labor	6	15,79%
Air pollution (and GHG emissions)	2	5,26%	HR - Forced or compulsory labor	6	15,79%

Supplier/vendor environmental assessment	2	5,26%	LA - Equal remuneration for men and women	6	15,79%
Forest area and its utilization	1	2,63%	LA - Labor/management relations	6	15,79%
Ground-level ozone and air quality	1	2,63%	PR - Marketing communication	6	15,79%
Soil	1	2,63%	SO - Public policy	6	15,79%
Z/KPI noise	1	2,63%	SO - Anti-competitive behavior	5	13,16%
			HR - Investment	4	10,53%
			HR - Human rights grievance mechanisms	3	7,89%
			HR - Indigenous rights	3	7,89%
			HR - Security practices	3	7,89%
			LA - Supplier assessment for labor practices	3	7,89%
			PR - Compliance	3	7,89%
			SO - Compliance	3	7,89%
			HR - Assessment	2	5,26%
			HR - Supplier human rights assessment	2	5,26%
			PR - Customer privacy	2	5,26%
			SO - Grievance mechan. for impacts on society	2	5,26%
			PR / SASB - Supply chain standards and selection	1	2,63%
			SO - supplier assessment for impacts on society	1	2,63%
			Z/ GRI - FP - Food Processing sector disclosures	1	2,63%
			Z/KPI Animal husbandry	1	2,63%
			Z/KPI Sourcing aspects	1	2,63%
			Z/KPI Transportation, handling and slaughter	1	2,63%

Research results (table 5) show that environmental indicators (EN indicators) are more frequent than and outnumber social indicators (SOC indicators), given that there are more companies reporting on certain environmental indicators. Environmental indicators that are widely recognized by the management of Croatian companies and reported on in sustainability reports are those relating to:

- energy (reporting companies 24);
- emissions (reporting companies 21);
- waste and effluents (reporting companies 20);
- water (reporting companies 18);
- materials (reporting companies 15).

The most common social indicators recognized and reported on are related to human resources. According to the GRI guidelines these would be in sub-categories of Labor Practices and Decent Work (LA) and relate to:

- occupational health and safety (reporting companies 19);
- training and education (reporting companies 18);
- employment (reporting companies 17).

The highlighted indicators in the table are the top ten environmental and social indicators most frequently disclosed. A large number of indicators with low reporting frequency indicate that sustainability reporting system of Croatian companies is in need of significant improvement. Low

frequency some significant indicators also denotes a poor quality of non-financial information disclosed in the sustainability report of Croatian companies.

#### 4. Conclusion and Recommendations

This paper provided an answer to the main research question stated “Is the quality of non-financial information disclosed in sustainability reports of Croatian companies in accordance with the provisions of Directive 2014/95/EU?” pursuant to the sample generated from Croatian companies registering 400 and more employees. Since the Directive is mandatory for all companies with 500 or more employees from 2018 on, it is very likely that it will appertain to all companies included in the sample. It should be noted that only 38 non-financial reports (sustainability, annual reports, social or responsibility reports, environmental reports, etc.) of 184 entities reporting (184 when merged with the respective business group; 221 retrieved entities) were available for analysis, thus making only 20.65% of all reporting entities.

The GRI or UN Global Compact guidelines are commonly used for a reporting system. There are no firm rules in non-financial reporting; since the number of pages (between 6 and 270), presented content, consistency of application of reporting guidelines applied and the presentation of non-financial information vary significantly, it is virtually impossible to compare presented information with those of the previous periods. It can be concluded that non-financial reporting system is inconsistent.

In the next step, a methodological framework of GRI guidelines (category and sub-category) and relevant quality attributes (relevance, comparability, verifiability and clarity) was used for assessing the quality of presented non-financial information. It can be concluded that that relevant environmental indicators are rather effectively implemented. Namely, environment indicators (energy, emissions, waste, water, etc.) are the most present non-financial information (47% – 63%) and consequently have been assessed with a somewhat the highest score (4.82 out of 9 possible), compared to other elements presented in sustainability and similar reports of Croatian companies.

Social indicators are much less common in sustainability reports (frequency from 2% to the 15%), with a lower quality of presented information (3.74 and less). The highest average attributes score was 2.92 out of 5 possible, with relevance viewed through identification of stakeholders, followed by relevance assessed by dialog with stakeholders and needs of stakeholders (2.47). All other attributes are very low (1.32 and lower), which suggests there is a need to identify stakeholders’ needs and disclosing results of dialog with them on a higher quality level. A conclusion can be drawn significant improvements are yet to be made in order to achieve higher level of overall quality (17.97 out of 45 possible) of non-financial reports, complying with the expectations emerging from the provision of Directive 2014/95/EU.

Based on the conducted research results are proposing an answer to the main research question that Croatian companies with 400 and more employees are not quite yet prepared for efficient implementation of Directive. However, certain fragments of non-financial reporting (e.g. indicators for presenting environmental non-financial information) can be used as a good starting point for building a uniformed non-financial reporting system with a higher quality level of information presented, indicating that the designated period for complying with the Directive in 2018 not will be sufficient. Future research which can contribute to the improvement of preparing, presenting and benchmarking non-financial information in sustainability report of Croatian companies, should be focused on few relevant areas of applied research with the goal to:

- build a relevant system of indicators, prepared in accordance with the GRI guidelines and industry/business features, which would be uniformly applied among Croatian companies using specific software solutions;

- define methodological framework of sustainability accounting for providing relevant non-financial / sustainability information, under the regulations, strategic documents and reporting standards/guidelines, considering the needs of internal and external users for short- and long-term decision making;
- examine the conditions for creating a benchmarking system, to allow the assessment of competitiveness in applying sustainability principles in the national and international level, pursuing the GRI guidelines and specific needs of certain industries / business.

Following a positive experience in application of the EMAS norm, it will also be necessary to build a system of control and audit of sustainability reports at the national level, as a prerequisite for quality, validity, credibility and reliability of data presented. In the same way in which EUROSTAT presents sustainability statistical data it will also be necessary to introduce a system of collecting and presenting such relevant data and information in Croatia. The purpose of all these and many other actions is to raise an awareness of importance in applying sustainability principles and thus achieving a higher level of responsibility for the environment and society.

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# Theory of Capital, Investment and Exchange Rate: A New Developmentalist Equation<sup>1</sup>

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## Abstract

It deals with the investment behavior and capital stock variation considering the flexible accelerator model and the Jorgenson's equation combining this model with the capital structure, the cost of equipment and taxation as explanatory factors. It takes into consideration the exchange rate in the open economies, its relation into production cost, profit expectations and hence investment decision.

## Keywords

Investment, exchange rate, economic development

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## Introduction

Relating investment decisions on profit expectations in uncertain environments and the interest rate was one of the contributions of Keynes to the economic debate. Thus, he attributed an important role in the monetary policy in the definition and choice of resources allocation. The current debate on the non-neutrality of money has summarized up to a discussion between short and long term, rational or adaptive expectations. There was little discussion about the neutrality of money in a complex global monetary architecture. The lack of coordination of monetary policy, or even the impossibility to affect global prices for small economies, changes the resources allocation. This paper seeks to relate the exchange rate to investment decisions, proposing an equation to estimate the impact of exchange rate changes and their level in the productive choices, thus understanding that coordination between monetary policies is not neutral.

In the definition of Keynes (1936), the marginal efficiency of capital is "the discount rate that would make the present value of the annuities stream of the expected rents of this capital, throughout its existence, exactly equal to its offer price" and decision to invest occurs up to the point where the marginal efficiency of capital is equal to the interest rate. Tobin treated this equality as a ratio, arguing that the decision to invest occurs when the market value of the company is greater than the cost of replacement of an incremental unit of capital. On its turn, in Bresser-Pereira (1991), companies require a profit rate higher than the interest rate, so that this variable becomes less relevant in determining investments. According to him shifts of the liquidity preference curve would be more important. More recently, he suggests that the expected profit rate is affected by the exchange rate.

For Bresser-Pereira (2012), due to the tendency to cyclical and chronic overvaluation (on long-term) of the existing exchange rate in developing countries, an exchange rate policy that neutralizes this trend and make the exchange rate competitive can stimulate the carrying out of investments, to the extent that it is the exchange rate that assures the companies of the country that use technology in the state of the art worldwide access to existing demand both external and internal. By prioritizing the profit expectation to make productive investments, Bresser suggests that there is **a positive relation between the exchange rate and the choice of capital goods acquisition.**

Although relevant, the specification of an investment function in Brazil that considers capital flows in open economies has not been specified in the literature. The present article aims to propose an expanded version of the theory of flexible accelerator of Dale Jorgenson that incorporates capital flows and the exchange rate in the equation; either because the capital structure can be built on carry trade operations, or because the expected profitability depends on the exchange rate. In short, either because of the conditions for funding, or by shifting the marginal effectiveness of capital, this paper proposes an equation that relates the productive investments to exchange rate.

## The Exchange Rate and the Investments

We are particularly interested in the literature on exchange rate and investment. Developing countries often need to import equipment, either because they do not produce enough internally, or because of available technology. The import of this equipment is compatible with an external constraint. The consequences are similar to the concept of credit rationing. There are limits to finance the import of capital.

Except for the new developmentalist<sup>3</sup> contribution, the relation between the exchange rate and the decision to invest is often inversely related. As mentioned, the effect of the exchange rate on the

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<sup>3</sup> New Developmentalism emphasizes the importance of natural resources curse, Dutch disease, and the Exchange rate value for economic growth.

import of machinery and equipment is taken into consideration and thus an increase in the exchange rate would inhibit productive investments. Although the relation between GDP fluctuation and thus, aggregate demand, and the variation in the stock of desired capital is enshrined in the models and arguments of the accelerator effect, little is said about a possible positive relation between the exchange rate, aggregate demand and the productive investments.

The new developmentalist thesis argues that the exchange rate is inversely related to the gross fixed capital formation, especially in the case of Dutch disease. In these circumstances, chronic and structural appreciation of the exchange rate is a limiting factor to productive investment due to depressing the expectation of profit.

The discussion about the relevance of exchange rate often appears in the literature associated with impacts on foreign trade, capital flows and the behavior of inflation. Possible allocative impacts and, in particular, the relation to the decision to productive investment are barely discussed. When we find an association between investment and exchange rate, this relation is ambiguous. "According to Servén and Solimano (1993a), the impact of a depreciation of the real rate exchange on the relative prices of capital goods have a major effect on the investment profitability. According to the authors, capital goods are composed of a combination of domestic components (construction and infrastructure) and foreign components (machinery and equipment). An increase in the exchange rate makes imported goods relatively more expensive, discouraging the import of capital goods while a reduction in the exchange rate stimulates imports of capital. Thus, it is expected that the relation between investment and exchange will be negative (Alves, 2007).

The new developmentalist thesis rejects this statement and argues that the exchange rate is inversely related to the gross fixed capital formation, because the exchange rate tends to be appreciated in the long run because of the Dutch disease (which exists in most developing countries) and the three usual policies that appreciate the exchange rate: the growth policy with deficit in the current account, the high interest rates policy and an exchange rate anchoring policy to control inflation. Soon after, however, this depreciation that assumes once and for all makes industrial companies in the country become competitive and increases its profit expectations and so they begin to invest and promote growth.

The proposition of new-developmental theory is therefore counterintuitive, in the sense that states that the relation between investment and the exchange rate is positive.

A reduction in the exchange rate foments an increase in the relative price of non-tradable goods in favor of prices of tradable goods. Thus, there is an increase in the expected profitability in non-tradable goods sectors, either because prices become relatively higher, or because the importation of machinery and equipment becomes cheaper. The analogous and reverse growth in exchange rate reduces the price of non-tradable goods and raises the price of tradable goods. In this second case, the expected profits for the tradable goods sectors rise so as to stimulate investments in this sector and change the allocation of resources. Another issue that arises is the effect of prices on the capital structure of companies. Growing prices allow both to rise the profit retention and the financing with equity instead of using third-party resources. As a significant portion of private savings is formed by companies, rising in prices tends to stimulate an increase in savings. As a change in the exchange rate changes allocative choice between sectors, it is assumed that its effect on the volume of investment is negligible. But if the allocative change redirects productive resources for the service sector, especially the segment of less sophisticated production, then we can expect a reduction in the volume of inversions in fixed capital, compromising the growth rate.

There is still to be considered the effect of financial flows on the capital market. A positive capital flow can both promote the exchange appreciation as increase the demand price of the investments,

measured by the trading value of multiple places. Empirical evidences of a positive relation between the exchange rate and the stock price can be found in Carvalho's work (2015). Thus, another way to explain deindustrialization is associated with a change in the Tobin's  $q$  discouraging investments in the sectors which are traded in exchange stock, where it's possible to compare the purchase price of a new investment with the price of a good existing investment.

Maintaining the exchange rate at the desired level to promote economic growth not only causes a change in the allocation of resources, but also has desirable monetary impacts for the financing of investments in the event that these are elastic with respect to the interest rate. This is because an increase in the exchange rate is usually accompanied by a monetary expansion and, consequently, a reduction in interest rates. But for this work, we consider that firms prefer to finance the capital expansion with internal resources.

A chronic exchange rate appreciation in the long run, promotes the reduction of profit margins of companies in the country, which are no longer able to export as well as lose the local market in favor of imports. Bresser calls this latter relation "the access problem." The combination of an expansionary policy with appreciated exchange rate generates demand for imported products, but local companies have "access" to this demand due to the exchange rate.

For the purpose of this paper, we consider that the exchange rate has important allocative effects on orienting investments and hiring in the tradable and non-tradable sectors. And, even though the uncertainty and risk inherent in the choice of investment in fixed capital are related to innumerable factors such as political risk, inflation, discretionary policies, among others, we will consider for the purpose of this work the exchange rate - as measured by the standard deviation of the rate of commercial exchange, as a measure of risk and uncertainty relevant to the choice of investing in fixed assets, whose characteristic is the irreversibility.

For Bresser-Pereira, the volatility of the exchange rate is long term, and is expressed in the tendency to the cyclical and chronic overvaluation of the exchange rate. In this case, the level of the exchange rate - the long-term rate, which is appreciated - weighs on the decision to invest, either for guiding the allocation of resources into sectors of tradable and non-tradable goods, either for affecting the expectation of profits by indication of the possibility of access to domestic and international markets, or by reducing or increasing the purchase price of equipment when imported. And still, for affecting the average comparative cost of labor and the cost of financing new investments.

Ideally, we should research which variation, or amplitude, is understood as a risk that might cancel investment decisions and what variations are considered normal and, therefore, have no effect on investment decisions in fixed capital. Thus, it would be possible to incorporate the risk associated with currency fluctuations as a *dummy*, multiplying the investment equation. In this way, in view of high volatility, the variable becomes zero, nullifying any positive effects on the possible choice of investments. However, in the case of a low variability, the variable assumes a unit value in order to nullify its effect on the choice of investment. In this case, weigh heavily on the decision to invest the level of the exchange rate, either because it guides the allocation of resources in the tradable or non-tradable goods sectors, either because affects the profits expectation when indicates the possibility of access to external and internal market, or by reducing or increasing the purchase price of imported equipment. Moreover, by affecting the average comparative cost of labor and the cost of financing, although the literature identifies that companies are chiefly financed with equity, it also identifies the credit constraint as a significant limitation in developing countries.

Rama (1993) summarizes the literature on investment decision in industrialized countries relating them to two basic arguments: the accelerator effect and the relative prices of capital and labor; therefore, the expected profitability. On the other hand, the literature on the decision to invest in

developing countries considers other four factors as relevant in determining the volume of productive investment: credit rationing, exchange restriction, shortage of infrastructure and economic instability.

In this way, we intend to specify an equation that contemplates the relation or the possible relations between the exchange rate and productive investment.

### Investment Models

There are some main models of investment: the accelerator model, Tobin's flexible accelerator. The capital stock is both a function of the level of activity (accelerator model), as a function of cost of capital, which may be represented by the equation:

$$K = f(Y, C_k)$$

The Jorgenson's function "specifies the goal function of a firm in terms of maximizing the present value of receipts over disbursements with wage current costs and investment spending".<sup>4</sup>

It implies an optimal structure of capital determined by the level of activity and the cost of purchasing machinery and equipment that can be described as follows:

$$K_t^* = p_t Y_t / c_t$$

The conditioned optimization function can be specified as follows:

$$I_t = \beta (\alpha y_t c_t^{-1} - K_{t-1}) + \delta K_{t-1}$$

Where  $I_t$  stands for productive investment,  $\beta$  for an adjustment coefficient, which measures the time lag between changes in the stock of desired capital and the decision to invest,  $y_t$  is the product,  $c_t^{-1}$  is the capital service costs, capital stock in the previous period and  $\delta K_{t-1}$  designates the investment of depreciation compensation. Note that the expression  $(\alpha y_t c_t^{-1})$  denotes the stock of desired capital. It is possible to recognize the importance of the expected returns, affected by short-term costs, as well as interest rates, depreciation rules and the purchase price of new machinery and equipment.

The cost of the capital service is affected by the price index for capital goods, taxes, rules of deductible depreciation in taxation and the real rate of interest or cost of capital. This relation can be defined by the equation:

$$c_t = q_t / [1 - u_t [(1 - u_t w_t) \delta + r_t - (q_t - q_{t-1}) / q_t]$$

Where  $c_t$  is the cost of capital service,  $q_t$  is the price index for capital goods,  $u_t$  is the tax rate,  $w_t$  is the reducing depreciation portion of taxable result,  $\delta$  is the depreciation rate,  $r_t$  is the cost of capital or the real rate of interest.

This model is a reduced form of Jorgenson's model because will consider only one-time lag. The full model considers the full lags or a distributed lag function of the optimal capital stock.

Another determinant the cost of capital is the subsidies and taxation.

Jorgenson's model deals with the optimization problem of a competitive firm, in hypothetical lack of adjustment costs, Cobb-Douglas type production function and constant returns to scale, among others. Jorgenson (1963) comes to the model that follows:

$$K = a Y C_k^*$$

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<sup>4</sup> Ronci, 1988

Where  $C_k$  indicates the cost of capital uses and reflects the share of capital in the Cobb-Douglas production function.

Likewise, the throttle model, this was also modified to take into account the serial correlation of investment, present in the gaps between decision-making and the implementation of investment, creating a distance between the current and desired capital stocks. The equation for change in the stock of capital was denominated flexible neoclassical model (see Hall & Jorgenson, 1967):

$$I = \lambda [(\alpha Y / C_k) - K_{t-1}]$$

Where  $0 < \lambda < 1$  indicates the *speed of adjustment* of the *capital stock*.

We aim to incorporate the exchange rate into the model, since the expected returns are a function of future possibilities for realization of production, which includes the expectation of export and domestic sales. Thus, a currency appreciated affects negatively the return expectations regarding the exportable portion of the production, either in *quantum* or in monetary values. However, this same appreciated exchange rate has a positive effect on investment in that it shifts production chains, reducing the short-term production costs and the purchase prices of new machinery and equipment.

### The Exchange Rate, Investments and the New Developmentalists

Bresser argues (2007) that the exchange rate that ensures economic development is that one which neutralizes the Dutch disease and corresponds to what he calls industrial balance. In other words, the exchange rate that assures the possibility of being competitive to firms with productive sophistication.

This article seeks to explore the idea that when the exchange rate is below the industrial balance, it affects profit expectations and investment of business and leads to deindustrialization. However, the effect of exchange rate appreciation on the expected future return must be greater than the effect of the exchange rate on the cost of capital and on the short-term costs. If the second effect is significantly higher, the exchange rate appreciation will stimulate productive investments.

“Myers and Majluf, in 1984, showed that companies are not indifferent to the capital structure, privileging the use of internal funds to finance investment and resorting to indebtedness and the issuance of shares, in this order, only in case of insufficiency of internal resources”. We assume that companies prefer internal funds to finance the investment. However, resorting to external financing resources includes carry trade options.

The hypothesis behind this argument is that there is no global monetary neutrality. Thus, relative prices are affected by coordination, or lack of it, of national monetary policies.

The equation of investments should also consider the relation between the expected returns and the cost of capital or the interest rate. But the free mobility of capital makes the local interest rate become a restriction only to investment of firms without access to the global market. The impact of exchange rate appreciation, therefore, would not be sensed in the short term. Thus, testing time lags can be significant.

The investments function proposed here is:

$$I = f(e_t/e_{t+1}, e_t, ICUTT, Y)$$

+        +        -        +

Where  $I$  is productive investment,  $e_t / e_{t+1}$  is a proxy for the equilibrium interest rate and for the exchange devaluation expectation in period  $t$ , and  $t$  is the exchange rate at time  $t$ ,  $ICUTT$  is the comparative index of average work cost and  $Y$ , the level of activity.

Moreover, considering the tendency to equalization of interest rates and the equation:

$$I_e + \text{risco} = I_{\text{Dus\$}} = I_d (e_t/e_{t+1})$$

Besides the interest rate, the relation between the current and future exchange rate also affects the capital structure of local firms and can be an important explanatory factor for private investment behavior.

In the Jorgenson's model (1971) the investment is a result of the need to adjust the company's capital stock to its optimal level. The difference between the optimal capital stock and the actual capital stock can be described by:

$$K_t - K_{t-1} = (1 - \lambda) * (K_t^* - K_{t-1})$$

Where  $K_t$  is the capital stock in period  $t$ ,  $K_t^*$  is the desired capital stock in period  $t$  and  $K_t - K_{t-1}$  is the variation of stock of capital corresponding to the volume of investments. When considering investment as an adjustment in the stock of capital in order to optimize it, equipment replacement is disregarded as an investment. As Jorgenson, we can consider the replacement investment as a fixed fraction of the capital stock.

$$I_r = \alpha K_t$$

Where  $I_r$  is the replacement investment,  $K_t$  is the capital stock in period  $t$  and  $\alpha$  the fraction that may be deduced from a depreciation policy.

Thus, the total investment can be described by the formula:

$$I = \alpha K_t + (1 - \lambda) * (K_t^* - K_{t-1})$$

$$K_t - K_{t-1} = (1 - \lambda) * (K_t^* - K_{t-1})$$

The choice of Jorgenson's model respects the thesis that productive investments are somehow endogenous, in the sense that the optimal capital stock depends on aggregate demand, or product level and the degree of the installed capacity. But the Jorgenson's model is also known as Neoclassical model as it supposes a production function from which the company seeks to maximize profits. Therefore, a change in relative costs of production, including equipment and workers, would promote a change in the optimal capital stock. Thus, the increased cost of machine use would cause a reduction in investments and an increase in the cost of workers would cause an increase in investments. Although the use of a production function is incompatible with the new developmentalist theses, increasing costs of the Labor Unit Cost is understood as a factor affecting the stock of desired capital, but not in the sense employed by Jorgenson. The increase in unit labor cost decreases profit expectations by reducing spending on investment rather than change the resource allocation.

Hence, instead of a Cobb Douglas function, as used by Jorgenson, we will describe a production function based on unit labor costs that can be defined as follows:

$$CUT_r = C_m/A^5$$

Where  $CUT$  is the unit cost of labor,  $C_m$  the actual average costs of labor per hour worked and  $A$  productivity of labor.

Another key difference between the Jorgenson's equation and the New Developmentalist proposal is that for the former, a change in the cost of workers makes it attractive investing in equipment, considering the expected return and the acquisition cost of capital. But, in an open economy, a change in unit labor costs that cannot be offset by a decrease in the cost of machinery and equipment, reduces

<sup>5</sup> On the unit cost of labor and this formula see: <http://www.bcb.gov.br/htms/relinf/port/2007/12/ri200712b8p.pdf>

the profit expectation and therefore discourages productive investment. There are also strong evidences of correlation between the average cost of labor and the exchange rate. Therefore, it is essential comparing the average labor costs in terms of reserve currency.

So, instead of describing the optimal capital stock as a direct function of the level of activity and inversely related to the cost of capital use, we will describe the optimal stock as a direct function of the level of activity and inversely related to the unit cost work.

$$K_t^* = \beta Y / \text{CUTr}$$

Additionally, the comparison between the CUTr in reserve currency with the unit cost of labor in other countries allows us to think about the allocation of resources in global terms. Hence, if CUTr is reduced in Mexico, profit expectations increase with the possibilities of future sales, which includes the global market, and increase the optimal capital stock. Therefore, the comparative index of unit labor cost constitutes a relevant variable for the investment decision.

The new conditional optimization function can be specified as follows:

$$I = \beta(\alpha Y_t \text{ICCUTr}_{t-1}, K_{t-1}) + \delta * (K_{t-1})$$

And the equation that describes the cost of capital service would be replaced by:

$$c_t = q_t / 1 - u_t [(1 - u_t W_t) \delta + e_t - (q_t - q_{t-1}) / q_t]$$

Where  $c_t$  is the cost of the capital service,  $q_t$  is the price index for capital goods,  $u_t$  is the aliquot part of the tax;  $W_t$ , part of the reducing depreciation of taxable result,  $\delta$  is the depreciation rate;  $e_t$  is the cost of the capital measured by the real interest rate. However, given the trend toward equalization of interest rates, the cost of the alternative is simplified as:

$$r_{br r\$} = [(i_{eua} + \text{risco})] (e_{t-1}/e_t) - \pi$$

Where  $r_{br r\$}$  is the rate of real domestic interest in national currency,  $i_{eua}$  the interest rate of the reserve currency,  $e_{t-1}$  the future exchange rate,  $e_t$  the current exchange rate and  $\pi$  the price index.

Accordingly, a devaluation of the local currency reduces the real interest rate and the cost of capital. It should be observed that the approach using the production function implies choosing between the use of the capital or the use of labor, depending on their relative prices. Thus, the choice of production is not necessarily associated with an investment choice. The association between the fluctuations in the level of product and stock of desired capital implies a production function with fixed coefficients. Thus, the increase in production induces productive inversions and raises the level of employment of labor. As a result, a consistent variation in the level of activity that gives rise to a degree of occupation of the existing production capacity such as to eliminate the idleness of productive plants will necessarily imply the increase in both production inputs considered in the production function: capital and labor.

If we assume a production function with fixed coefficients, the average cost of the worker becomes a determinant of investment choices because, instead of a substitution of the input labor for the input capital, there will be a decrease in both. Possibly, there will be a displacement from the labor force to jobs in less competitive sectors, with unmarketable products.

It should be noted that we are not here despising the offer price behavior of capital goods. But considering an open economy with free flow of goods, the law of one price guarantees the trend of convergence of prices in the tradable goods sector, among which is the segment of machinery and equipment. The same does not apply to labor force, since the flow of workers has less mobility when compared to the flow of goods. Thus, it is considered that the average labor costs tend to inhibit expenditures of capital goods and are more relevant to the choice.

In Jorgenson's model, there is no component explicitly associated with the profitability. There is, however, in replacement or proxy, the effect of the product range on the stock of desired capital stock or optimal capital stock.

What is proposed instead, is to make explicit in the equation the expectations of future profit increasing the accelerator effect.

Thus, not only the variation in activity level would impact on the optimal capital stock. Access to this variation in the income plays a fundamental role on the expectations.

Therefore, the effect of exchange rate on both the reduction of exports as well as in the increase in imports is an indicator of the degree of "access" that domestic companies have on household consumption internally and the level of access to the share of world income.

The Thirlwall's law relates the growth rate of the economy to the ratio of the income elasticity of imports and income elasticities of exports.

$$I = \theta (Y_{t+1} - Y_t)$$

Where  $I$  is investment,  $\theta$  is simple accelerator effect ( $Y_{t+1} - Y_t$ ) the change in activity level.

In the flexible accelerator model, an effect with time lags and decreasing weights is used.

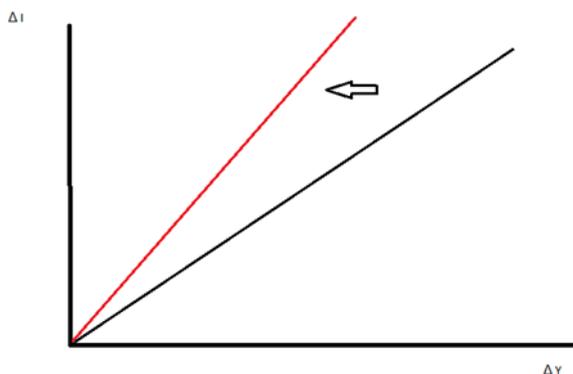
We'll think of the throttle model in two stages. In the first one, we'll "ponder" the access to variation in the level of activity (XVIII) and then consider the time lags of the flexible accelerator model.

$$I = \theta [\epsilon^R_x / \epsilon^R_m (Y_{t+1} - Y_t)]$$

In this way, the optimal capital stock moves whenever there is economic growth and, analogously, when there is growth of the income elasticity of exports, increasing access to the international market. However, the growth of the income elasticity of imports minimizes or reduces the impact of variation in the level of activity on the desirable stock of capital, discouraging productive investments.

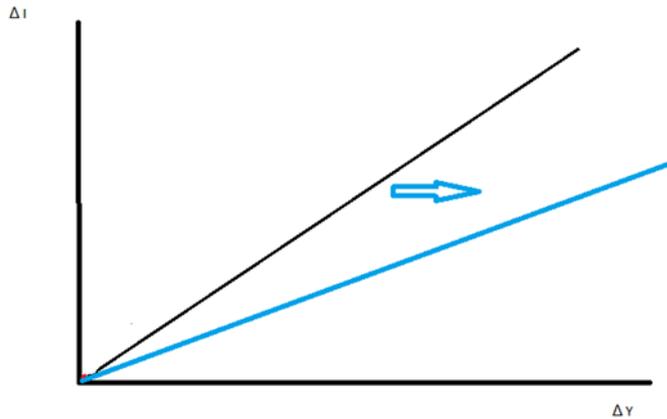
So, we are not associating investment with the exchange elasticities of exports and imports. But we are relating the profit expectation to the income elasticity and the cost of the service of capital to the exchange rate.

Figure 1



The curve changes slope and shifts to the left when the ratio of the income elasticity of exports and the income elasticity of imports increases ( $\epsilon^R_x / \epsilon^R_m$ ), in this case, a small variation in activity level promotes an increase in the stock of optimal capital and an expressive shift in investment spending.

Figure 1



The curve changes the slope and shifts to the right when the ratio of the income elasticity of exports and the income elasticity of imports decreases ( $\epsilon^R_x / \epsilon^R_M$ ), in this case an increase in income promotes lower impacts on the stock of desired capital as well as on the investment.

Figures 1 and 2 show how the inclination, or the impact of income variation on investment, is changed when the ratio of the income elasticity of exports and the income elasticity of imports increases and decreases respectively. The Thirlwall coefficient starts to enhance or slow down the impact of variation in the level of activity on productive investments.

However, the intuition is that the curve is not a linear function, but a curve, in such a way as there is an inflection point from which the investments cease and start to decrease. Even a negative variation is possible in case the depreciation is greater than the actual investment.

### Conclusions

The investment functions that are enshrined in the literature do not include the exchange rate or its oscillation as a relevant variable to explain the choice of investment. The regarded relation between these variables is negative, assuming that a reduction in the exchange rate stimulates spending productive investment on account of cheapening the access to more sophisticated machinery and equipment in the international market.

This paper aimed to relate the productive investment choices in a production function with fixed coefficients, with the comparative index of the average cost of labor and the exchange rate. It is considered that the fluctuation of the exchange rate can constitute an important measure of risk and that its significant variation can paralyze investment decisions that are not related to specific market needs. Thus, a wide variation in exchange rate was considered as a dummy variable that takes zero and therefore, the measurement of the effect of the exchange rate level on investment is negligible.

Additionally, the ratio between the household income elasticity of imports and income elasticity of world export was considered as a measurement of the magnitude of the effect of the exchange rate on investment choices in fixed capital additionally.

It now remains for other work, testing the investment function and see to what extent this model can explain the performance of productive investments in recent years and even help predict the behavior of productive investments.

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## Co-evolution and the Red Queen in Global IT Sourcing Ecosystems: An Examination of Competitive Hysteresis in Chinese and Indian IT Markets

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### Extended Abstract

#### Synopsis

*This research takes an interdisciplinary approach to examining the rapid development of and changes in the Information Technology (IT) outsourcing market through the lens of an evolutionary biology theory known as the Red Queen. The study will model the co-evolution of innovation among competitors in the global IT outsourcing industry in China and India using the Red Queen Theory. Two hypotheses are presented and a methodology for an empirical test is offered.*

Here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

- **The Red Queen to Alice in "Through the Looking Glass"** (Carroll, 1898)

#### Introduction

The history of global trade is punctuated by points where business practices are suddenly transformed by strategic structural shifts marking fundamental changes to the nature of competition. **Global Information Technology Sourcing** (GITS) represents such a tipping point for this and future business generations.

GITS is defined as the contracting of part or all of a company's IT functions to either third-party vendors or in-house development centers that are based abroad. What once started as simple, remote code-testing has progressed to the international sourcing of application development and critical business processes. Over the past three decades, the global IT outsourcing industry has burgeoned from almost unnoticeable in the mid-1980s to a \$288 billion market spanning thousands of companies worldwide today (Gartner Report, 2013). In this highly competitive market, outsourcing vendors have been subject not only to pressures from rivals around the globe, but also to the vagaries of their own home country economic and political environments. In a bid to stay competitive, these companies have been forced to constantly and continuously innovate and improve their offerings just to maintain their position in the outsourcing landscape. This scenario – one of constant change simply to avoid extinction – is often referred to as the Red Queen Effect.

In 1973, evolutionary biologist, Leigh Van Valen, postulated the Red Queen Effect to describe the escalating actions of participants trying to maintain a competitive posture in dynamic environments. Drawing on a scene in Lewis Carroll's, "Through the Looking Glass" (Carroll, 1898), Van Valen notes that in an exchange with a character called The Red Queen, the protagonist, Alice, notices that despite

her constant running as fast as she possibly can, she never seems to get anywhere. When she remarks on this, The Red Queen responds, *"Here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"*

Van Valen (1973) argued that in an evolutionary system, any genetic improvement in one species will result in a competitive advantage over rivals or prey. In order to avoid extinction, competitors must co-evolve (or run) simply to maintain the same relative "fitness" in the marketplace (Robson, 2005). The only way a species in competition can survive is to improve its design every time a rival makes a positive change. As an example, Van Valen describes the fox that must evolve to get faster and quieter in order to catch the hare. Over time, to avoid extinction, the hare must develop longer, more sensitive hearing to sense danger from the "improved" fox. This co-evolution keeps both in relatively the same place.

Since the formulation of the Red Queen Effect (alternatively known as the Red Queen Theory), it has been used to explain non-biological behaviors ranging from military arms races (Baumol, 2004) to failure rates (Barnett and Hansen, 1996) to technological competence (Knudsen, 2005). Indeed, Baumol (2004) argues that the Red Queen effect is among the most powerful mechanisms driving economic development in a capitalistic society. This research proposes to be the first to study the applicability of the Red Queen Theory to GITS systems, specifically comparing the actions in two very different Asian markets – India and China.

In 2006, China initiated the "Thousand-Hundred-Ten Project" to promote the growth of China as a world class IT outsourcing destination. China's goal was to build 10 service outsourcing base cities, promote the transfer of service outsourcing business of 100 world-famous multinational companies to China and establish 1000 large/middle scale service outsourcing enterprises (China Sourcing). The strategy seems to be working. China's IT outsourcing revenues are expected to grow by 30% in the next year. Dalian, China's equivalent to India's Bangalore, currently accounts for nearly 75% of Japan's offshore projects and is also host to a number of large western multinationals including HP, Accenture, and IBM (Ellis, 2010). Cities such as Shenzhen, Guangzhou, and Chengdu, in addition to stalwarts such as Shanghai and Beijing, have emerged as promising locations for companies to send offshore IT work. And with billions of RMB being poured into state-of-the-art infrastructure and nearly 500,000 engineering graduates being produced every year, China seems poised to give India a run for its money as an offshore IT destination (Kwong, 2010).

Yet more and more companies are reporting problems with working with Chinese IT firms. Inexperience with western business practices, lack of English communication skills, cultural differences in perceptions of hierarchy, all have undermined the confidence of US firms looking for an alternative to India as an offshore destination. Given China's relatively recent entry into the global IT sourcing market, many of the local companies have not experienced significant competition in their regional market, particularly for domestic projects, and has not forced them to continuously innovate and improve.

### **The Research Question**

This research proposes to develop a model of co-evolution in the global IT sourcing markets of China and India, and test two hypotheses related to competitive hysteresis using secondary data from available industry sources. The specific research question being addressed is, *has India's longer history of competition in the IT outsourcing market created an ecosystem of more robust competition that results in stronger competitors than in Chinese markets?*

**Proposition (competitive hysteresis): Organizations with greater exposure to a recent history of competition are more viable and generate stronger competition.**

Hypothesis 1A: Chinese IT sourcing firms are less viable than their comparably sized India counterparts.  
Hypothesis 1B: Chinese IT sourcing firms are less competitive than their comparably sized Indian counterparts.

**Expected results:** While the specific constructs in the study (viability, competitiveness, etc.) have yet to be formally defined and operationalized, it is expected that the study will show the following: The Red Queen argument that the “fitness” of a competitive ecosystem is based on competition, not the environment, suggests that China’s lack of experience and competition in the GITS market should make it less viable than its India counterparts. This may not be the case in China, however. While the Red Queen Theory assumes that the competition operates at the company level, the involvement of central government offices in supporting Chinese firms may, in fact, lead to the “environment” playing a greater role in determining competitive co-evolution. That is to say, the government role in China’s development of its IT industry may cause the country business environment to have a greater impact on competitiveness than is suggested by the Red Queen Theory. I believe the data will suggest that the IT environment in China is unique and has a greater impact on Chinese IT firms than competition. This suggests that the Red Queen Theory must be modified for markets that are influenced by factors that are differentially present in competitive markets.

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## Individual Performance Benefits of Multiplex Relationships

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### **Abstract**

Scholars have long been aware of the advantages of social capital to individual performance. It remains unclear whether these advantages reflect the effects of relationships in which people discuss only work-related issues, or whether they are attributable to the effects of multiplex relationships, in which people discuss work-related and non-work-related issues. To investigate this question, we conducted two studies using network analysis, a cross-sectional study of specialty bank employees and a longitudinal study of middle managers enrolled in an MBA course. Multiplex relationships consistently predicted performance advantages in both samples, while work-focused ties that excluded a social dimension did not. Further, when individuals maintained too many multiplex relationships, performance returns diminished. These findings demonstrate that the network literature may benefit from greater specificity on relational content and more attention to the consequences of overlapping networks, in the form of multiplex ties.

### **Keywords**

Multiplexity, social networks, social capital, network theory, individual performance

## **Inflation-Adjusted Accounting Ratios, Industry Growth and Their Potential to Assign Companies into Three Economic States**

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### **Abstract**

Despite several decades of research, the evolutionary process of corporate crisis has not fully been understood and has not yet been determined theoretically. There are many open questions which merit further investigation in this field and this paper aims to provide a contribution towards a better understanding of the assignment of companies into three stages of corporate health. Within this paper, Austrian companies from different industries were assigned into three economic states based on the distress indicator of net income. Based on selected accounting ratios, this study aims to detect whether such variables are helpful in differentiating between the three different economic states. In addition, the study was also designed to test whether the adjustment of certain variables for inflation and the inclusion of industry growth can be a significant contributory factor. It was found that achieving separation between insolvent and recovered firms is difficult as such companies possess several common characteristics. Healthy firms are more profitable than insolvent firms and this in turn implies that management efficiency is an important factor for the prevention of insolvency. The adjustment of accounting ratios for inflation was not found to be beneficial in increasing the prediction performance of models based on logistic regression. Finally, it was found that industry growth is only significant if the firm finds itself in the pre-insolvency stage. This implies that industry-classification is not important for business success, but is however a driver for the probability of insolvency when the company approaches bankruptcy.

### **Keywords**

Accounting ratios, corporate crisis, discriminant analysis, financial distress, industry growth, inflation accounting, logistic regression

## 1. Introduction and Problem Statement

For many decades, researchers have been searching for solutions to help predict corporate insolvencies and crises. During that time, many research attempts have been made, with analysis focused primarily on the differences between bankrupt/insolvent and solvent firms. This has resulted in the creation of rating systems that are currently in use, where it is possible to assign a probability of a firm defaulting. Due to the high number of firms included in such analysis, it is implicitly assumed that a broad spectrum of firms with various states of corporate health are included, so that the economic and financial attributes of these phases are captured accordingly. However, a theoretical explanation has yet to be accepted regarding certain stages of corporate health between the dichotomous states of solvent and insolvent.

The motivation for this study was driven by two aspects. Firstly, one cannot find many research papers analyzing the stages of corporate health between solvent and insolvent, a fact which is also confirmed in the literature review of this paper. It is therefore interesting from a research standpoint to make additional efforts in order to gain a better understanding of corporate behavior in times of financial distress. Secondly, not much attention has been devoted to business failure prediction research considering the adjustment of accounting ratios for inflation and its effect on the potential early detection of crises and insolvencies. As highlighted within the literature review, this aspect has rarely been analyzed and has only been done for the dichotomous states of solvent and insolvent. No study was found which evaluated the contribution of inflation adjustment towards the different stages of corporate health, with the result that this work attempts to establish a new approach in this field.

The paper is organized as follows: Firstly, a compressed literature review is provided, comprising the origins of insolvency prediction, the methods applied therein, the relevance of accounting ratios for prediction purposes, some research results for different stages of corporate health, as well as results concerning inflation and early detection of corporate crises and insolvencies. Secondly, the data set for this empirical study is described including the independent variables and adjustment process for inflation, as well as the definition of the three states of corporate health. Thirdly, a description of the applied methodology is provided, including both the research hypothesis and research questions. Fourthly, the most important aspects of model building and the main results are then highlighted. Finally, the paper concludes with the most important implications from the study, the hypothesis test, answers to the research questions, limitations of the study and potential approaches for future research.

## 2. Literature Review

Research in the context of insolvency prediction is well established and the first papers in this field were published by Beaver (1966), Altman (1968), Blum (1974) and Edmister (1972). The main purpose was to differentiate between insolvent and solvent firms based on selected accounting ratios, which best positioned to discriminate between the two types of firms. Over the course of recent years, different types of variables have continued to be tested which were not gathered from financial statement analysis (e.g. macroeconomic factors [Hol, 2007; Liou & Smith, 2007; Tirapat & Nittayagasetwat, 1999], market data [Chaudhuri, 2013; Kim & Partington, 2015; Kwon, Lee & Kim, 2013] or qualitative factors [Iazzolino, Migliano & Gregorace, 2013; Pervan & Kuvek, 2013]) and it was shown in the majority of these studies that a combination of accounting ratios and other non-accounting ratios leads to an improved distinction between the different types of firms (for example in Altman, Sabato & Wilson, 2010; Grunert, Norden & Weber, 2005; Iazzolino, Migliano & Gregorace, 2013; Muller, Steyn-Bruwer & Hamman, 2009).

A review of the methods used shows that research originated by using univariate and multivariate linear discriminant analysis (Beaver, 1966; Altman, 1968; Edmister, 1972; Blum, 1974) even if

theoretically normally distributed data (Burns & Burns, 2008, p. 590-591; Keasey & Watson, 1991, p. 90-91) is necessary to guarantee a proper application, a condition which is hardly fulfilled when dealing with empirical data. An extension was attempted using quadratic and non-parametric discriminant analysis, but neither research methods gained further attention as they did not provide better results than linear discriminant analysis (Altman, Haldeman & Narayanan, 1977; Gombola, Haskins, Ketz & Williams, 1987; Pacey & Pham, 1990).

Ohlson (1980) then introduced logistic regression, where the normality of data is not necessary and where it is possible to directly compute probabilities for an object belonging to a specific group. Even if there were not strict theoretical pre-conditions for the application of logistic regression, empirical results showed that it did not always outperform linear discriminant analysis (Casey & Bartczak, 1985; Gepp & Kumar, 2008; Hwang, Cheng & Lee, 2007). Nevertheless, its application seems theoretically sounder when using a maximum-likelihood procedure which is not that strongly affected by non-normally distributed data and unequal variance (covariance-) matrices (Silva, Stam & Neter, 2002, p. 412-413).

A further extension was reached by introducing neural networks into research, where the non-linear thinking of the human brain can be replicated in order to model complex process behavior (Arbib, 2003, p. 3; Saunders & Allen, 2002, p. 11). Neural networks can deliver more accurate prediction models when compared to linear discriminant analysis and logistic regression (for example, as shown by Anandarajan, Lee & Anandarajan, 2001; Charitou, Neophytou & Charalambous, 2004; Neves & Vieira, 2004), however these results were not subsequently confirmed by other studies (Chen, Marshall, Zhang & Ganesh, 2006; Pompe & Bilderbeek, 2005; Sen, Ghandforoush & Stivason, 2004).

Apart from the aforementioned examples, many others methods were also used for the construction of insolvency prediction models: Recursive partitioning (Frydman, Altman & Kao, 1984; Huang, Tsai, Yen & Cheng, 2008; Muller, Steyn-Bruwer & Hamman, 2009), case based reasoning (Bryant, 1997; Lin, Wang, Wu & Chuang, 2009), genetic algorithms (Anandarajan, Lee & Anandarajan, 2001; Brabazon & Keenan, 2004) or support vector machines (Li, Sun & Wu, 2010; Lin, Liang & Chen, 2011) are some such examples, to name but a few. However, the review of relevant literature shows that linear discriminant analysis, logistic regression and neural networks are the most prominent methods used in the research of crisis and insolvency prediction (Du Jardin, 2009, p. 44; Oesterreichische Nationalbank, 2004, p. 40-41).

The use of accounting ratios as predictors for corporate failure and insolvencies is not without some criticism. It is argued that managers can manipulate accounting figures based on the scope of generally accepted accounting principles, so that they may not be in the position to capture the true underlying economic and financial situation of the firm (Keasey & Watson, 1991, p. 97; Sharma, 2001, p. 18; Tsai, 2013, p. 44). It can also be argued that the information provided by financial statements is backward-looking and reflects the history of the firm (Anderson, 2007, p. 137; Madrid-Guijarro, Garcia-Pérez-de-Lema & van Auker, 2013, p. 583). Nevertheless, they are of some relevance for prediction purposes, which was shown in several empirical studies. They seem especially effective as predictors when companies move towards insolvency and are also contain valuable information to determine the economic and financial situation of the firm (Ak, Dechow, Sun & Wang, 2013, p. 591; Huang & Zhang, 2012, p. 290; Milburn, 2008, p. 287). These aspects justify their application for the purpose of this study.

When analyzing research in this field, one mostly finds studies where the dichotomous thinking between solvent and insolvent companies has been analyzed for prediction purposes. It was emphasized relatively early in research that the economic and financial situation of a company can rather be described by a continuous scale, meaning that it can be categorized into different degrees of health during its lifetime (Altman, 1968; Edmister, 1972; Haber, 2005). This was the motivation to

conduct studies analyzing these different stages in-between the extremes of solvent and insolvent, in order to achieve a deeper understanding of the crisis evolution process. The number of these studies is relatively low when compared to the amount of studies in the field of bankruptcy prediction as a whole (Situm, 2015b, p. 590).

Mixed results can be found in this area. Some results showed that it is very difficult to differentiate between the different stages as they each exhibit strong similarities, with the result that they cannot be clearly segregated (Barniv, Agarwal & Leach, 2002; Chancharat et al., 2010; Lau, 1987; Poston, Harmon & Gramlich, 1994; Sen, Ghandforoush & Stivason, 2004; Tsai, 2013; Wilson, Chong & Peel, 1995) Other studies have been capable of showing that a differentiation between selected stages is to a certain degree possible, which can lead to satisfactory results (Barniv, Agarwal & Leach, 2002; Chatterjee, Dhillon & Ramirez, 1996; Jones & Hensher, 2004; Sudarsanam & Lai, 2001). However, the actual process within crisis evolution is still not fully understood and therefore undermines the relevance of studies in the field of crisis and insolvency prediction, as there is still a lack of an appropriate theory which is connectable to already existing and recognized financial theories (Situm, 2015a, p. 17).

Finally, it is worth reflecting upon some results concerning the consideration of inflation for prediction purposes. The non-consideration of inflation when analyzing accounting ratios seems to provide over- and understatements of the real economic situation of the firm (Ilter, 2012, p. 161). One problem with prediction models is that they are often based on distributional assumptions which are not stable over time, leading to non-stationarity, although inflation is one reason for this aspect (Mensah, 1984). Empirical evidence shows that the inclusion of inflation can help to improve the predictability of models as higher inflation increases a firm's vulnerability to distress and insolvency (Bhattacharjee, Higson, Holly & Kattuman, 2009; Butera & Faff, 2006; Liou & Smith, 2007). However, within the study of Norton & Smith (1979), the consideration of inflation did not provide better classification results, a finding which is contrary results to papers mentioned previously. Despite this, it is assumed for this study that the adjustment of accounting ratios for inflation will help to develop more accurate prediction models for different economic states when compared to accounting ratios which are not adjusted for inflation.

### 3. Data Set and Segregation of Companies into Different Economic States

The data base of this study consists of Austrian companies from different industries, where the financial statements for the years 2008 to 2012 were available. The year 2012 was set as the bankruptcy date. Based on this, the following observation periods were used and accordingly defined:

- 2012 as bankruptcy date:  $t(0)$
- 2011 one year prior to bankruptcy  $t(1)$
- 2010 two years prior to bankruptcy  $t(2)$
- 2009 three years prior to bankruptcy  $t(3)$
- 2008 four years prior to bankruptcy  $t(4)$

No common ground exists in order to help identify a firm as being distressed. Instead, certain proxies can be used for this task which have already been applied by prior research. Potential approaches could be to use two or more consecutive years of operating losses (Poston, Harmon & Gramlich, 1994; Molina & Preve, 2009; Platt & Platt, 2008), a current ratio of less than one (Poston, Harmon & Gramlich, 1994) or when the interest coverage ratio is lower than one (Jostarndt & Sautner, 2008; Molina & Preve, 2009).

*Table 1: Composition of groups and conditions for identification*

Group number	Type of firm	Number for firms in initial and validation sample	Identification of distress		Identification of recovery from distress	
0	Insolvent	64/10	Not relevant		Not relevant	
1	Recovered	49/10	Negative net income	Negative net income	Positive net income	Positive net income
2	Healthy	234/60	Positive net income	Positive net income	Positive net income	Positive net income

Within this work, distress was defined as the situation when a firm displayed operating losses (negative net income) for two consecutive years, meaning in  $t(4)$  and  $t(3)$  (Krueger & Willard, 1991, p. 29). After that point, the development of net income was observed in order to detect turnaround activities. Firms which had a positive net income in  $t(2)$  and  $t(1)$  were defined as having recovered from distress. A similar concept was used by Jostarndt & Sautner (2008), however their distress indicator was an interest coverage ratio based on EBIT. Insolvent firms were identified by an insolvency mark and these were entities which went bankrupt under Austrian bankruptcy law. Healthy firms were identified by showing no negative net income over the defined observation period. *Table 1* summarizes the number of firms in the study and the process of identification concerning the states of distress and recovery.

#### 4. Variables, Research Hypothesis, Research Questions and Methodology

The starting point was to define discriminating variables which have the capability to distinguish between different types of firms. Here, 20 variables were chosen based on results from prior research, where eleven were profitability ratios, of which the first nine were also adjusted for inflation.

The adjustment for inflation was based on the following equations (used by Solnik & McLeavey, 2009, p. 43):

$$(1 + i_{real}) \times (1 + inflation\ rate) = (1 + i_{nominal}) \quad (1)$$

$$i_{real} = \frac{(1+i_{nominal})}{(1+inflation\ rate)} - 1 \quad (2)$$

This logic was then transferred to the seven profitability ratios accordingly. A winsorization on the two percent level was conducted in order to address the problem of non-normally distributed data as proposed by Löffler & Posch (2007, p. 15-19). Based on the literature review provided and further empirical evidence, the following research hypothesis should be tested:

The inclusion of inflation adjusted accounting ratios into a prediction model can improve the segregation of firms into different states of corporate health.

The attempt to falsify this hypothesis is done using a twofold approach: Firstly, logistic regression models were computed with accounting ratios which were not adjusted for inflation, in order to determine their discriminatory power. Secondly, the previously computed models were extended to use inflation-adjusted accounting ratios and their performance was then compared to the models without inflation-adjusted accounting ratios. Finally, a new variable was introduced named  $GDP_{growthind}$ . This is a dummy variable containing the value of one in circumstances where the industry of the respective firm was contributing towards the GDP growth of the country and the value of zero otherwise. The data was obtained from Statistik Austria (2015a). Such a variable was not tested in previous research attempting to distinguish between different types of firms. The associated research questions are:

- Which accounting ratios are significant in explaining the differences between the various types of firms?
- Can the adjustment of profitability ratios for inflation help to improve the classification accuracy and hence the performance of prediction models?
- Can the inclusion of industry growth help to improve the assignment of companies into the different economic stages of company health?

The following methodology was used for this study:

- Winsorization of variables on the two percent level
- Computation of descriptive statistics and tests for normality of data
- Computation of tests for differences in order to detect the best discriminating variables available
- Computation of logistic regression functions in order to derive the combination of accounting ratios which best differentiate between the different types of firms
- Evaluation of model performance using accuracy, type I and type II errors

## 5. Model Development

Table 2 provides the estimated results of the other comparisons across the different stages of corporate health. It was not possible to determine a model which could differentiate between insolvent and recovered firms due to the lack of statistical significance between the potential discriminating variables. This provides evidence that both types of firms display similarities concerning their economic and financial conditions when considering the applied distress and recovery indicators, with the result that making a distinction between them is quite difficult.

Table 2: Classification models based on logistic regression

	Model I	Model II	Model III	Model IV	Model V
<i>Statistical values:</i>					
R <sup>2</sup> (%)	12.767	15.806	12.767	15.806	9.484
Sign. Chi-Square	0.057	0.629	0.057	0.629	0.930
<i>Variables:</i>					
AGE	0.029**	0.030**	0.029**	0.030**	0.017*
NITA	6.595**	6.066**	-	-	-
NITA <sub>infl.</sub>	-	-	6.813**	6.267**	-
CFTD	-	-	-	-	2.812
GDP <sub>growthind.</sub>	-	0.913*	-	0.913*	-
const.	0.222	-0.499	0.439	-0.299	0.565
Classification accuracy based on data for the period (t-1) - Initial sample:					
Accuracy (%)	79.530	79.866	79.530	79.866	82.686
Type I (%)	95.313	89.063	95.313	89.063	100.000
Type II (%)	0.000	1.282	0.000	1.282	0.000
Classification accuracy based on data for the period (t-1) - validation sample:					
Accuracy (%)	87.324	90.000	87.324	90.000	85.915
Type I (%)	90.000	70.000	90.000	70.000	100.000
Type II (%)	0.000	0.000	0.000	0.000	0.000

\*) statistical significance at the 5 percent level; \*\*) statistical significance at the 1 percent level

The table shows the different models computed in order to distinguish between insolvent and healthy firms (model I – IV) and between recovered and healthy firms (model V). Model I consists only of accounting ratios, although within model II a dummy variable has been included denoting the contribution of the respective industry of the firms to GDP growth (GDP<sub>growthind.</sub>). Model III considers inflation-adjusted accounting ratios and this model is replicated in model IV, but here once again the GDP growth variable has been included. Model V contains only pure accounting ratios, as it was not possible to include neither the GDP growth variable nor inflation-adjusted accounting ratios. All of the

models have been constructed using the data from the initial sample, although the ratios have been winsorized on the 2 percent level in order to increase model performance as proposed by Löffler & Posch (2007, p. 15-19). The explained variance of the models was appraised by  $R^2$  of Nagelkerke (Burns & Burns, 2008, p. 579-580). The accuracy was computed by the number of true positives and the number of true negatives, divided by the total number of cases (Fawcett, 2006, p. 862). The results provided are valid for the standard cut-off value of 0.5.

The signs of the variables are plausible and in congruence with prior research. Firms with higher age (AGE) are more likely to be assigned as healthy (Bates, 1990, p. 555; Chava & Jarrow, 2004, p. 545). The results also show that a firm's recovery is associated with higher age, a finding that was not reported in previous studies. However, due to the relatively low weightings it can be concluded that this variable seems to be of minor relevance, however it is still statistically significant at the one percent level.

Firms displaying a higher profitability (NITA) are more likely to be assigned as healthy. Profitability is an indicator of management efficiency (Dambolena & Khoury, 1980; Edum-Fotwe, Price & Thorpe, 1996). This finding is visible in the medians for this ratio when observed for two consecutive years. NITA deteriorated for insolvent firm in t-2 from 3.65 % (inflation-adjusted: 1.72 %) to 2.89 % (inflation-adjusted: -0.40 %) in t-1. For healthy firms, it decreased only slightly from 4.88 % (inflation-adjusted: 2.92 %) in t-2 to 4.66 % (inflation-adjusted: 1.31 %) in t-1. It is a safe assumption that profitability deteriorated for both these types of firms, however the relative decrease was much higher for insolvent firms when compared to healthy firms, indicating that insolvent firms are less well managed than healthy firms.

Even if the version of the model which includes inflation-adjusted ratios was not able to outperform models without inflation adjustment, the inflation-adjusted data for NITA shows that insolvent firms were not in the position to offset the value-destroying effect of inflation, with the result that their inflation-adjusted profitability was seen to be negative in the year prior to bankruptcy, which was not the case for healthy firms. This could be interpreted as follows: Firms heading towards insolvency can have a positive profitability, which should also be positive when measured at real values. If this is not the case, then there is a higher likelihood that they are insolvent. However, the validity of these results serves only as an indication of the need for further testing and research attempts in this area.

The inclusion of the dummy variable GDP industry growth was beneficial for model building, as the explained variance between the variables was increased based on the  $R^2$  provided from Nagelkerke. The positive sign indicates that a firm operating in an industry positively influencing GDP growth of an economy is more likely to be healthy. This provides evidence that a firm belonging to a shrinking industry increases the probability of insolvency. A similar finding was also reached in the papers of Lennox (1999a), Lennox (1999b), Thornhill & Amit (2003) and Chava and Jarrow (2004), when using other variables.

The higher the relation of CFTD, the more likely a firm is to be healthy. In summary, it is interesting to note that the adjustment of accounting ratios for inflation as proposed by equation one and two did not provide additional explanatory power, with the consequence that the model's performance was not increased. Therefore, the hypothesis of this work must be generally rejected and it can instead be concluded that the adjustment of accounting ratios for inflation cannot improve the classification of firms into different stages of corporate health. These results are somewhat surprising based on the literature review provided. The results obtained support the findings of Norton & Smith (1979) that the consideration of inflation does not provide better classification results.

## 6. Summary of the Results and Conclusions

The results of this study provide many interesting results, some of which have not been provided by prior research, as well as providing some conclusions upon which further research can be conducted. Firstly, the effectiveness of using net income as a distress and recovery indicator is questionable. If the ratio could be an indicator for such separation, then it should be possible to make a much better segregation between the different types of firms. In addition, the ratio should provide far more statistically significant differences in the potential discriminating variables. Therefore, it cannot be concluded that a firm experiencing two consecutive years of positive net income after a period of two years of consecutive losses cannot be assigned as being recovered. It also cannot be concluded that a firm which experiences positive net income for four consecutive years can be defined as healthy. This provides evidence that there is a need for more suitable indicators which better describe the economic and financial situation of the firm, as net income also includes tax effects and extraordinary items, leading to material informational distortion (Krueger & Willard, 1991, p. 28 – 29).

Secondly, the variable  $GDP_{growthind}$  showed statistical significance to enable separation between insolvent and healthy firms, but it was not helpful to segregate between recovered and healthy firms. This finding supports prior results that the industry a firm is operating in does matter when considering the probability of default (as indicated by studies already cited). It shows no relevance in segregating between recovered and healthy firms, which gives the impression that industry does not contribute towards business success, thereby supporting the empirical results of Sheppard (1994). It seems that much depends on the economic situation of the firm when determining whether industry-classification does or does not affect the probability of default. This is a result which has not been reported in prior research in this area.

Lastly, the contribution of inflation-adjusted profitability ratios towards the prediction of stages of corporate health was not confirmed by this study. The inclusion of such variables was neither beneficial towards increasing the explanatory power of the models nor did it improve classification accuracy. However, there is an indication that NITA in real values should remain positive after correction for inflation, as otherwise the tendency towards insolvency is higher. The measurement of management efficiency should therefore be conducted using inflation-adjusted ratios instead of unadjusted ratios. Only then it is definitively possible to establish whether management has performed efficiently or not.

Despite the interesting results obtained in this study, there are some limitations which must however be explained. The most important limiting factor to consider is the relatively low sample size, meaning that results may not be entirely conclusive or representative. However, when compared to other studies the sample size is in fact high (Poston, Harmon & Gramlich, 1994; Whitaker, 1999; Sudarsanam & Lai, 2001). It was not possible to review more cases, due to restricted data access. Another aspect to consider is that data was mainly non-normally distributed in form, and that as a consequence winsorization at the 2 percent level has been applied in order to avoid this problem. Nevertheless, the data remained non-normally distributed, which can be observed to be of minor relevance when logistic regression is applied (Burns & Burns, 2008, p. 569). Even if this view appears to be widely recognized, certain deviations from normality can nevertheless influence the model's accuracy (Hopwood, McKeown & Mutchler, 1988). Within this study, different proportions for the different types of firms have also been used, which may lead to inconsistencies during the maximum-likelihood estimation of logistic regression. This can also affect classification accuracy due to sub-optimally estimated models (Tufféry, 2011, p. 478).

The classification results are valid for the cut-off value of 0.5. A further test was applied with different cut-off values, and it was possible to reduce type I error with a parallel increase of type II error. It follows therefore, that the computed models cannot be used for practical purposes and can only deliver some empirical insights into the behavior of firms in different economic states. Further research

is therefore needed in order to provide a more profound clarification of the crisis and insolvency evolution process.

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## Perceptions of Management on Factors Influencing Diversity in a Multicultural Higher Education Institution

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### Abstract

South African higher education institutions face diversity and multiculturalism challenges which affect their operation, strategies and growth. Diversity is a characteristic of a multicultural work environment and has been acknowledged by researchers as a phenomenon that has a wide array of effects in the workplace and within society in general. Diversity implies acknowledging and valuing differences among people and as such diversity brings a collective strength that can benefit all of humanity. Accordingly, diversity viewed from a positive perspective can create significant opportunities for a higher education institution to obtain a competitive advantage. While managements move towards the creation of a multicultural institution, diversity management has a dual focus of increasing competitiveness through institutional transformation and enhancing social justice. Transformation in South Africa is a reality hence management must be prepared to facilitate diversity to ensure the effective functioning and growth of its institutions. This paper reports on research that endeavored to determine the perceptions of management concerning factors which influence diversity at a selected higher education institution. Respondents at management and supervisory level were surveyed at Walter Sisulu University (WSU) in South Africa, using a self-administered questionnaire. Structural equation modelling (SEM) was the key statistical analysis tool. Confirmatory factor analysis was used to verify that the identified factors had relationships with diversity and to assess convergent validity. Cronbach's alpha reliability coefficients confirmed the consistency of the inter-item reliability of the research instrument. Four statistically significant relationships were identified in the study. The findings revealed that diversity has a positive relationship with management's perceptions regarding acculturation, structural integration, informal integration and intergroup conflict. It is argued that knowledge of these factors influencing diversity could provide insights for management in developing strategies to capitalize on diversity for sustainability and growth. The study makes a contribution to multicultural higher education institutions by highlighting the critical role of effective diversity management for achieving competitive advantage.

### Keywords

Competitive advantage, diversity, higher education institution, multicultural, structural equation modelling

## **Entrepreneur-Friendly Business Environment: Is Supportive Tool For Strategy Planning In Small And Medium Sized Companies?**

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### **Abstract**

Strategic planning may have little value to owners when they operate their business in favorable business environment. Majority of SMEs do not plan and the reasons why they behave like this are not well understood. For the majority of SME owner's business performance often ranks far behind other goals such as autonomy, personal satisfaction and lifestyle. The main goal of this paper is to quantify a relationship between overall satisfaction with business environment and their willingness to plan their activities. This article presents case study from Moravian-Silesian region (NUTS 2 region in the Czech Republic), where a long-term study was conducted. This case study present three period observations (pre-crisis, crisis and post crisis period) in years 2007-2014. Main findings showed, that a number of SMEs without strategy planning arose from 39.5% to 46.2% in post economic crisis period. Finally, statistically significant ties were found in relationship between overall satisfaction and marketing activities, crisis planning and production planning.

### **Keywords**

Business environment, Moravian-Silesian region, SMEs, strategic planning

## Introduction

Importance of SME activity we could describe in terms of social, economic and environmental contribution to the society. Their existence has an effect on the stability of society and political changes and market uncertainty can bring risks for SMEs. Benefits of SMEs in the economic and social sphere are obvious. Balanced regional development needs a balance between social, economic and environmental pillars. The concept of sustainable regional development and local entrepreneurial activities links to European strategic documents for planning period 2014+. Tetřevová (2009) confirmed that small businesses play integral part of every region in which they provide their entrepreneurial activities. Their effect on the area may be positive and negative in relationship with regional socio-economic results, but on the other hand they have an influence on region. The economic status of regional SMEs have an influence on the overall standard of living in the region, because it affects the unemployment rate, number of people dependent on unemployment benefits, the amount of wages to their employees, and number of all actual or potential workers in the region. Secondly, entrepreneurs contribute considerable sums on public budgets, so the economic aspect of the company affects also municipal budgets. Their contributions are in the form of income tax, road tax, real estate tax, but there is one local or administrative fees. In the case of favorable economic results, they support social policy and benefits, create new jobs and arise regional competitiveness.

Each adaptation in business is an impulse to change and may cause unexpected behavior inside or outside the company, so there a reason why the plan is needed. This article aims to present results of a regional study, which confirmed flexibility of small businesses and their high level of adaptation. Those enterprises can develop an open system that is capable of rapidly adapting to positive and negative external influences. We discuss relationship between overall satisfaction and type of strategic planning. As a contribution to the literature, the paper will highlight which elements have the biggest influence on the planning process in the small and medium sized enterprises of business.

### 1. Business Environment and a Need of Planning

The business environment is characterized by a number of factors which significantly affect the already operating businesses or new businesses. Factors affecting the level of communities or regions are those that directly affect people for private business. Trade and services most closely related to factors such as distance to markets or customers, availability of labor, but production is the most important quality of infrastructure, availability of various types of resources and the quality and professionalism of government (Binek et al., 2011). The last few decades brought more opportunities to use strategic and creative thinking and apply its flexible implementation on market failures, which come not only from final customers but from threats within new technologies and these factors together apply pressure on adaptable business behavior (Evans, 1991; Grewal & Tansuhaj, 2001; Drucker, 2008). Turbulence in a business environment could be defined according to Babtista and Karaöze (2007) as a developmental process, where organizations are depicted in the market in two ways: (i) New organizations coming into the market to fill a gap created by companies which closed down or were in crisis because of the strategy of displacement; (ii) New competitors appearing when a "niche" arises in the old market and this behavior replaces the power of the main competitors in the market.

Most of previous studies simply stress on the effect of the indicator of new business formation activity on a performance measure with some control variables; however, some studies have applied an explicit production function framework. That also contains indicators for the contribution of other inputs to growth (Audretsch & Keilbach, 2004; Audretsch, Keilbach & Lehmann, 2006; Wong, Yuen & Autio, 2005). Monitoring the degree of flexibility can encourage greater creativity and focus on strategic planning and management in small and medium enterprises, which is so often underestimated. Subsequent delay introducing changes could cause major changes in behavior and may influence the ultimate effectiveness of the strategy (Green, 1977). A positive relationship between

the regional level of start-ups and subsequent strategic growth was confirmed in several countries like United Kingdom, United States and Sweden (Ashcroft & Love, 1996; Acs & Armington, 2002). But a number of other studies could not identify such a positive relationship between the level of start-ups and regional employment, growth and business strategy (Audretsch & Fritsch, 1994; Fritsch, 1996, 1997).

Thus the conditions for consistency of adaptability, innovation and strategy are fulfilled. Without these components, the firm cannot adapt to changes in the regional environment. From knowledge of current modern methods of management and business management services in general it can be inferred that the enterprise can develop an open system that is capable of rapidly adapting to positive and negative external influences such as special tax treatment at the employee level with non-deductible impact at corporate level (Blechová, 2011).

Firms often do not actively respond to changes in the external environment due to their dependence on attractive resources, more likely they will confront compliance in order to make something less necessary. Turbulent times bring about not only new technologies but well-informed people, who use their potential in business practice. They create their own business repertoire which causes dynamic behavior in the market on any level of the organization. In particular, these tendencies are observed in the area of services such as banking, professional services and legal services, which require consistency and conformity (Dobni et al., 2001).

Finally, regional business environment represents the supportive infrastructure for entrepreneurship such as entrepreneurship-friendly laws and regulations in the area of establishing a business, the existence of supporting services for business founders as well as for established firms. Business support from the municipality is linked to specific locations, districts and entrepreneurs. The direction of support of a community are influenced by the size of the municipality and its relationship with region. It depends on them how they deal with local potential and local conditions to support business services. Each district or municipality can support development of business activities in several areas like (Binek et al., 2011): (i) development of living conditions for residents and businesses (facilities, infrastructure), (ii) development of an environment for civic activities (development of community, support of social business, non-for-profit organizations), (iii) development of business environment (business promotion, support of local businesses).

### **1.1. Strategy planning in small and medium sized enterprises**

Strategic planning and the use of modern methods is generally associated with the creation of long-term plans based on the objectives that the company wants to achieve, but it depends on sources, which are used in business. From practical point of view, strategic planning encourages entrepreneurs to exploit their competitive advantages. (O'Regan & Ghobadian 2002; Wang, Walker & Redmond, 2007). Strategic planning can be considered with the small and medium enterprise development. Exact formulation of the vision and the subsequent formulation of goals and strategies may be useful for the growth of business performance. Strategic thinking and planning becomes an important part of business practice. The main reason why some SMEs use planning and others not yet is not so far examined (Wang, Walker & Redmond, 2007; Glaister et al., 2008). Nevertheless, the available studies indicate that companies who use plan, they achieve more favorable economic performance. They are more innovative and they participate in cooperative structures. They have an influence on the development of its employees, which grow faster than companies who do not plan their activities and owner personal example do not support this activity (Skrtnič & Antončič, 2004). If we return to the question of why the majority of small and medium-sized enterprises (SMEs) have no desire to engage in strategic planning, we find out many common obstacles. The main reason for this situation may be the existence of „best practices“ that business owners use and other methods for them are becoming unimportant (Gibson & Cassero, 2005). On the other hand, the accumulation of tasks on owner's

responsibility that are necessary to secure business is main reason, why time for strategic thinking is not so important. Planning for SMEs is not focused solely on economic results. SMEs are in fact very heterogeneous group of firms with different reasons for their existence on the market. It is therefore obvious that the owner will naturally engage in strategic planning, mainly because it was for him personally advantageous. Small and medium enterprises with high growth potential need to efficiently design changes and support the growth of the industry (Wang, Walker & Redmond, 2007).

The basis of maintaining adaptability to environmental changes, growth, business competitiveness and long-term business growth is the ability of firms to innovate. Each sector has different characteristics and priorities - some are sensitive to the scale of production, others to scientific research or the range of or sensitivity to demographic changes. Therefore, an analysis of the strategic elasticity of small and medium-sized businesses could help to find an answer to the question of how this business segment could deal with challenges from the external environment and what type of strategies they might use to achieve their goals. It is anticipated that the research findings will illuminate the definition by Krupski (2005), who described elasticity in four dimensions as: (i) reactive, (ii) adaptive, (iii) defensive, (iv) creative attributes of the strategy of an observed firm.

## **2. Satisfaction and Strategic Planning: Case of Moravian-Silesian Region**

According to Synek (2007) and Kislingerová (2010) advantages for Czech SMEs result from disadvantages of large enterprises. Small and medium-sized enterprises play an important economic and inevitably also political and stabilizing role in developed market economies. The current trend is to focus assistance to SMEs and also the Czech executive devotes considerable attention especially to start-up companies, particularly in the early stages of their development. Support from the state budget or from EU subsidies is mediated by the respective fund in most countries (the Czech Republic is not an exception). Thus, from a competing (competitive) perspective, companies must be able to adapt to the new requirements of the market, society and stakeholders. Often allow them flexible and personal character. Quick response to these changes is often possible for most SME, because they can more easily identify and seize market opportunities than many larger businesses.

### **2.1. Key characteristics of Moravian - Silesian Region**

The Moravian-Silesian Region, as the fourth largest regional economy according to a RIM Plus (2014) generated 10,2% of the national GDP, and reached 97% of the national average of GDP in PPS per the employed, the second highest value in the Czech Republic. Despite the modernization of many companies, the innovation activities in the business sector are rather below-average. The region consists from 6 districts (LAU 1) which are also different in socioeconomic indicators. Typical for this region is neighbourhood with Poland and Slovakia, typical is heavy industry, high level of foreign direct investments in area of IT and automotive industry (Tieto, Hyundai company).

The Moravian-Silesian Region is traditionally considered problematic region, in the past fairly major structural changes underwent which were followed by a higher unemployment rate and a higher proportion of long-term unemployment, compared with other Czech regions (Adámek et al., 2015).

Figure 1: Location of Moravian-Silesian Region



Source: <http://www.risy.cz/cs/krajске-ris/moravskoslezsky-kraj/verejna-sprava/spravni-cleneni/uzemni-cleneni-mapy/>

Regional socioeconomic analysis is mostly based on three pillars, which assess impact of actions on regional policy. Those pillars are economical (dynamics of economic development), social (investments in social capital, main indicator for societal development) and finally environmental (eco-friendly approach, recycling). Main condition of society development is to give the balance between those pillars (Minařík et al., 2013). In this context, Kapstein and Kim (2011) presented fully developed matrix of socioeconomic impacts on local community and their model includes four dimensions: (i) Macroeconomic impacts (GDP contribution and other macroeconomic indicators), (ii) Socioeconomic impacts and linkages (education, employment), (iii) Community impacts (changes in settlement, social structure, migration), (iv) Environmental impacts (pollution, investments for environment protection), so we characterized this region by followed indexes (see table 1).

Table 1: Regional Macroeconomic indicators 2007-2014

Macroeconomic impacts (GDP contribution and other macroeconomic indicators)	Index 2007/2014	Socioeconomic impacts and linkages (education, employment)	Index 2007/2014
GDP growth	8.5 %	Wages and Salaries	4.0 %
Disposable income of private households	33.3 %	Employment rate	2.1 %
Real growth rate of regional gross value added (GVA)	-141.9 %	Unemployment rate	1.2 %
		Tertiary educational attainment, age group 25-64	42.7 %
		Business units	-69.1 %
Community impacts (changes in settlement, social structure, migration)	Index 2007/2014	Environmental impacts	Index 2007/2014
Migration	-280 %	Population connected to wastewater collection and treatment systems	5.7 %
Population growth	-2.6 %	Environmental protection expenditure	28.70 %
People at risk of poverty or social exclusion	3.0 %		
Total patents - inventors	3 %		
Researchers	29 %		

Source: Czech statistical office, 2015, indicator data were compared to year 2007 as a baseline.

As being illustrated, main regional problems are with community impacts (high level of migration to capital city), decrease of level of business units, when last year (2015) closed companies exceeded start-ups in the region. This situation affected our size of research sample in three periods of our survey.

## 2.2. Methods and data sample description

The key task of the questionnaire based research is to ascertain the respondents' awareness of and attitudes towards the basic elements of cooperation between the region – municipality and the entrepreneur and the definition of factors influencing small and medium-sized enterprises in the Moravian-Silesian (MS) Region. We used long term analyses – a quantitative research which was repeated three times in the same group of entrepreneurs. The evaluation period covers years 2007-2014. In each period researchers computed minimum of research sample, when the minimum was computed on 153 respondents); the sample was representative to the original structure of businesses in the region in years 2011, 2013, 2015. Researchers conducted several random checks for internal consistency in responses when Cronbach's Alpha was in whole sample 0.845. SPSS statistical package was used for data evaluation.

*Table 2: Key classification of the sample*

	Description of sample			Size of business unit				
	Evaluation period	Period name	Sample size	self employed	1-9	10-49	50-249	Total
1 <sup>st</sup> round (2011)	2007-2009	Pre-crisis	617	12%	51%	17%	20%	100%
2 <sup>nd</sup> round (2013)	2009-2011	Crisis	466	9%	42%	25%	24%	100%
3 <sup>rd</sup> round (2015)	2011-2014	Post-crisis	215	12%	46 %	27%	15%	100%

Source: own research data

As illustrated in the table 2 above, the number of surveyed SMEs declined during the time. The reason was strictly personal – willingness to continue in surveys or the company closed operation in the regional market. As it is possible to compare, we could observe re-sizing of companies, when the number of employees is in decline to be significant in group till 10 employees.

Our main research question was, if business owners got some experience from crisis period and they try to avoid problems in the future by strategy improvement. In the 3<sup>rd</sup> round we made small innovation in the survey. We want to know if satisfaction with current state of business environment could affect their approach to strategic plans, types of sub-plans and longevity of plan to be able to prepare some recommendation for local policymakers, how to cooperate more with local entrepreneurs.

## 3. Entrepreneurial Satisfaction and Strategic Planning

Favorable business environment has an influence on real business behavior. When we compare results in the table 3 below, we find out, that the trend is in increasing planning without any written form.

*Table 3: Long-term evaluation of strategic plan use*

	Form of plan				
	Without written form	Written, brief	Written, detailed	Other (part of organizational culture)	Total
1 <sup>st</sup> round (2011)	39.5%	32.8%	15.7%	12.1%	100%
2 <sup>nd</sup> round (2013)	36.6%	39.0%	15.8%	8.7%	100%
3 <sup>rd</sup> round (2015)	46.2%	21.4%	11.4%	21.0%	100%
Trend	↗	↘	↘	↗	

Source: own research data

When the comparison is made cross examined periods, when crisis problems came into small businesses they tried to use brief written plan. Unfortunately, when the risk in the market were

reduced, they moved their force and knowledge in other activities and they returned to unwritten form or in form of unwritten rules of business (part of organizational culture).

Is there some lessons learned? In pre-crisis period SMES in the region were satisfied with support of business activities, many of them just start-up their business, so they didn't feel any need to change things (table 4).

Table 4: Solved problems by strategic plan

	Without any change	Extension of plan	Main goal change	New strategic plan	Crisis plan in use	Total
1 <sup>st</sup> round (2011)	57.6%	12.1%	11.5%	6.1%	12.8%	100%
2 <sup>nd</sup> round (2013)	25.0%	39.0%	14.0%	10.0%	12.0%	100%
3 <sup>rd</sup> round (2015)	21.3%	35.7%	9.7%	17.6%	15.7%	100%
Trend	↘	↘	↘	↗	↗	

Source: own research data

After crisis period they understood, that without new direction they are not able to compete in the market. Finally, they understand, that they must be prepared for unexpected situations by crisis plan use.

### 3.1. Satisfaction and strategic planning

In accordance with the previously mentioned results, we continue with our findings with entrepreneurial opinion, where the most important factors from 3<sup>rd</sup> period are summarized in the Table 5 below. We used the Likert scale (5 – the worst, 1- the best) for evaluation. Most factors with the higher mark in the responses (top five), have the same rate of standard deviation (fluctuation) in the responses. The more stable group is to be seen in the last five factors which have a minimum rate of deviation.

Table 5: Significant factors influencing business behaviour in post crisis period

Top 5	Mean	Std. Deviation	Last 5	Mean	Std. Deviation
Quality of labour force*	2.03	1.396	Cluster cooperation*	2.66	.190
Ample amount of customers	2.10	1.442	Regional export support*	2.68	.171
Legislation*	1.92	1.138	Brownfield regeneration policy*	2.81	.171
Local Bureaucracy*	1.89	1.193	Lack of alternative financial sources*	2.90	.122
Location in region	1.87	1.253	Available housing for employees*	3.13	.122

Source: Šebestová, 2015, when \* means statistical significance at level of p<0.05

We used the same scale for overall satisfaction evaluation, when 1 means completely satisfied and 5 dissatisfied. We compared those findings in detailed analysis in table 6. We used Cramer V coefficient to describe a relationship between those nominal values.

Table 6: Relationship between satisfaction and plan structure

Factor	Cramer V Value	Approx. Sig.	Level of satisfaction(important group)
Existence of plan (form of plan)	.133	.813	Completely satisfied (1)
Finance	.167	.305	Completely satisfied (1)
Development	.231	.043*	Completely satisfied (1)
Main goal change	.204	.112	Completely satisfied (1)
Production plan	.250	.020*	Very satisfied (2)
Purchase plan	.141	.515	Very satisfied (2)

Marketing	.270	.008*	Very satisfied (2)
New strategic plan	.142	.502	Very satisfied (2)
Longevity of plan	.167	.880	Very satisfied (2)
Logistics activities	.136	.556	Satisfied (3)
Plan of investments	.187	.187	Satisfied (3)
Crisis plan in use	.305	.001*	Dissatisfied (5)

Source: own research data, when \* means statistical significance at level of  $p < 0.05$

As is illustrated in the table above, when entrepreneurs are very satisfied, then they think more about their business and plan more activities, there is statistical significance between group of entrepreneurs and part of business planning. Overall findings confirmed statistical significance of finance plan, production plan and marketing plan.

#### 4. Discussion and Conclusion

In comparison between those periods, the most significant for us was post crisis period, when we were able to explain, how entrepreneurs deal with an experience from previous crisis. If we compare these results with some international studies like the Lithuanians (Vasauskaite, 2013), there is the same tie and significance in area of financial resources.

In case of significance of satisfaction, we could mention that results are quite similar to pre-crisis period. Business owners do not see risks anymore so they are mostly satisfied, so they prefer unwritten form of planning in more than 43% of cases. Longevity of the plan wasn't statistically significant, but descriptive statistics brings us interesting findings. (see table 7)

*Table 7: Relationship between satisfaction and longevity of the plan*

Level of satisfaction	No plan	Till one year	2-3years	Till 5 years	More than 5 years	Total
No response	74.1%	5.6%	14.9%	5.4%	0.0%	100 %
Completely satisfied	60.0%	0.0%	20.0%	20.0%	0.0%	100 %
Very satisfied	56.7%	6.7%	16.6%	16.6%	3.4%	100 %
Satisfied	69.3%	4.5%	15.9%	8.0%	2.3%	100 %
Less satisfied	66.7%	0.0%	16.6%	10.0%	6.7%	100 %
Dissatisfied	87.5%	0.0%	12.5%	0.0%	0.0%	100 %

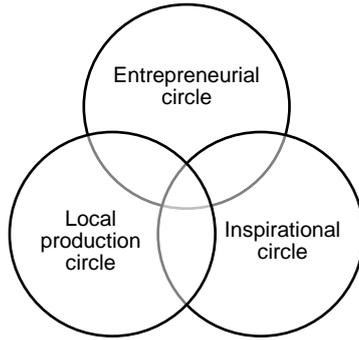
Source: own research data

When the satisfaction is decreasing the longevity is declining too. A massive group of dissatisfied entrepreneurs do not plan any activity. This examination confirm theory of Krupsky (2005) that SMEs in Moravian-Silesian region are mostly adaptive. They are adapting to current conditions, when it get worse, they do not plan, because it doesn't make any sense to them.

To support more reactive behavior of SME in Moravian-Silesian Region we are suggest increase of cooperation between local government and entrepreneurs according Valová (2016) and Binek (2011) in form of three circles of cooperation.

First option for small business development and the associated development of the business environment is circle of local production in form of a catalogue of artisans and traders. There are so many local producers, small craftsmen and traders, but there is lack of promotional activities. His circle could help them enforce their satisfaction with marketing activities (see table 6) and could enforce connection with region. This circle should be one of the activities to support small business development, as the issue of local production is often overlooked in the development area and the potential of local tradesmen and artisans is insufficiently exploited.

Figure 2: Three circles of cooperation



Source: Valová, 2016.

Second option is the creation and implementation of entrepreneurial circle to promote business within the region to avoid decline in number of business units (see table 1). This circle represents a platform for building relationships with the private and public sector to support satisfaction with business environment (see table 5). Generally, it is the creation of an economic and a social network in the region in more informal way. Benefits of realization of the business circle we see the following points: (i) sharing workers, (ii) mutual promotion, (iii) stronger linkages to region, (iv) exchange of experience in projects. Other part could be special grant system for innovative projects.

Third circle named Inspirational circle will bring innovative spirit into region in not only technical way. The main goal is seeking new proposals and solutions for development of the local area. They can involve people from the business community, students and officials and create an active group, which aims to improve the conditions and quality of life in the region. It could bring creative platform for solving municipal and societal problems, support of public and private projects.

Those recommendations could support favorable business environment but on the other hand it would support planning skills of SME in Moravian-Silesian Region. Nowadays, those recommendations are partly implemented in local strategies on municipality level.

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## Global Perceptions of Project Management in Business

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### Extended Abstract

The importance of Project Management (PM) is documented for many years, but recently has received more attention in business because of implementation of complex enterprise systems. The effective project managers are needed more than ever for successful completion of the projects and therefore the demand for project managers are increasing. Organizations are increasingly seeking effective project managers to lead their strategic initiatives impacting different areas of business. These initiatives are mostly IT-dependent and therefore considered to be significant investments for an organization. The IT projects have a low rate of success and effective project managers are increasingly needed. The Standish Group found a significant relationship between successful technology project and experienced project manager.

The institutions are responding to the demand for effective project managers by focusing more on the project management in the curriculum and offering more graduate and undergraduate courses in project management. The institutions are also offering graduate programs in Project Management as well as offering project management concentration. In computing curricula including those for Information Systems (IS) and Information Technology (IT), PM is emphasized to the extent that a PM course is an integral part of the IS Model Curriculum. Other areas of business including Management have acknowledged PM as an important topic of focus and are encouraging and training students for Project Management Institute (PMI) certificate. The goal is to better prepare students for the job market, receiving better job offers and performing better on the job.

Therefore, this research is focusing on all business majors rather than technology majors such as IS & IT to gauge the interest of students about project management and contributing topics to project management.

### Purpose

The primary purpose of this research is to gain insights into the perceptions of students majoring in business from different countries about project management and its related topics and skills before taking a project management course. In addition, this research will assess if there is a change in perceptions of students after completing the course. This research also gauges student's perception of the impact of PM on life, other courses and careers.

The students are assessed at the beginning of the course about the importance of project management and skills important to them in project management. This helps them realize the skills they poses and the skills they lack and need to develop. They will then go through a project management course requiring them to complete individual and team projects. The project management course is designed to help students develop the skills needed to be an effective project manager and learn how to carry out a successful project adding measurable values to an organization. The course helps students to focus on the skills they thought they lack and need to develop before taking the course.

Research mainly has focused on the PM course design and pedagogical techniques with less focus on student perceptions. Research is needed to examine the role of PM course in changing perceptions of students about the importance of PM and the skill sets needed by an effective project manager.

The effective project manager knowledge and possession of essential skills have been the interest and research of both corporate researchers/consultants and academicians. For example, it is suggested that effective project managers should have technical and relationship management skills as well as the ability to effectively manage expectations of the project stakeholders.

### **Participants**

The students from different countries majoring in business are surveyed about their project management perceptions and related topics before and after completion of a project management course. The countries currently represented in the data collection are China, Germany, India, Mexico and United States. The purpose is to expand representations and invite more students from more countries to participate in this research.

### **Method & Data Analysis**

A pre-post survey method is used in this research. The survey instrument was administered at the beginning and end of the project management course which included three major components: (1) demographics, (2) importance of project management and (3) project management topics and skills. A five-point Likert scale from strongly agree (5) to strongly disagree (1) was used for each item of second component.

The survey items were derived from the skills and competencies of effective project managers identified by the PMI and Project Management Body of Knowledge (PMBOK) and those identified by previous researchers. The list of topics and skills included: Soft and Technical skills, Globalization and International Environment, Leadership, team Building and Team Work, Collaboration and Communication, Prediction and Forecasting, Organizational, Enterprise Systems, Software Engineering, Development Methodologies and Vision.

While more data will be collected, the collected data is currently being analyzed and will be ready for presentation. Also, a complete list of references will be available.

### **Keywords**

Project management, project manager, project management skills

## Expert Review of Brand Personality of Kazakhstan as a Tourism Destination

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### **Abstract**

The perception by the world community, ensuring the flow of investments, attraction of tourists and increase of exports is vital for any country. Today, the need for a unique offer that provides a competitive advantage and increase of tourists is becoming an objective of the tourist destinations in an increasingly competitive environment, variety of proposals, and similarity of the services offered. Today, for Kazakhstan, the share of which in the world tourist market is negligible, there is an acute issue of forming a positive image based on a real distinctive properties promoting tourist loyalty which determined the relevance of this study. The goal was to identify the opinions of international experts about Kazakhstan, showing feelings towards it and its tourist services, behavioral intentions to use these services and interest in relation to the country, which in turn can be estimated phase of forming the country's image as a tourist destination.

Conducted survey of foreign experts opinions displayed sufficient positive association with the country's image. However, lack of knowledge about history and culture of the country suggests the need for an active promotion of the tourism potential of Kazakhstan information abroad, in order to promote Kazakhstan's brand on the world market of tourism services.

### **Keywords**

Brand, Kazakhstan, destination, image, expert review

## 1. Introduction

For several years, Kazakhstan is trying to find its worthy place in the international tourism market. However, to date, the segment occupied by Kazakhstan on the world tourism market, is insignificant. The highest growth rate of tourist arrivals in the last decade occurred in the dynamics of the number of domestic tourists (4,24), the lowest - in inbound tourism (1,75).

According to the research of the company IPK Group:

- recognition of Kazakhstan at the Asian market is 80% and 45% of the European market;
- for 44% of respondents the name of the “Kazakhstan” create an curiosity, but as a tourist destination does not create the associations.

In order to create the tourism image of the country, the Agency for Tourism of the Republic of Kazakhstan held separate events: info-tours for representatives of leading international media, the production of information leaflets, participation in international tourism fairs and exhibitions, unfortunately, have increased interest in the domestic tourist services is negligible.

The main reason for these failures is a lack of a systematic, scientific approach in the formation of thoughtful country brand that takes into account the unique history and culture of our people to meet the requirements of modern foreign tourists.

Currently formation of the brand of the Republic of Kazakhstan as a factor in long-term development of the tourism industry in the eyes of world public due to certain reasons:

- lack of a unified program of initiatives in the field of branding;
- lack of a single government agency responsible for the development and promotion of the Kazakhstan brand;
- the lack of thought out and permanent policy in the field of external communications;
- the lack of a public institution in Kazakhstan which is developing a brand through public diplomacy.

## 2. Theoretical Background

Analysis of brand management development paradigm was carried out in the papers of Brand Management (Heding, Knudtzen & Bjerre, 2009). Features of brand-building practices, such as identity issues are widely covered in David Aaker's papers (Aaker, 1997; Aaker, 1999; Aaker, 2002). The need of a strategic approach in brand management was pointed out in Keller's papers (Keller, 1993).

In «Handbook on Tourism Destination Branding» (Anholt, 2009) the importance of the formation of tourism brands for travel and tourism industry, the possible branding strategies, the conditions of their using were considered. The research “Branding: Global, Virtual and Physical Identities, Constructed, Imagined and Experienced” (Govers & Go, 2009) represents the genesis of the modern local branding, arguments combining facts, techniques and principles in an academic format provides the fundamentals of local branding, useful for use in practice. In “How to Brand Nations, Cities and Destinations: A Planning Book for Place Branding” (Moilanen & Rainisto, 2009) carefully collected and analyzed scientific and theoretical basis and methodology, based on practical experience of how to create a local brand: country, city or tourist destination. A plan of action includes the steps and methods to follow the participants and organizers for the successful implementation of the strategy to create a local brand. Focusing on a number of global studies, the authors of “Destination Branding: Creating the Unique Destination Proposition” (Morgan & Pritchard, 2002) demonstrate how large and small destination can

successfully use the branding opportunities, differentiate themselves and emotionally be closer to potential tourists. The study "National Image and Competitive Advantage: The Theory and Practice of Place Branding" (Jaffe & Nebenzahl, 2006) provides a structured in-depth analysis of the relationship between brand, country and product image, including guidelines for management action. Subjects covered include requirements for the labeling of the country of origin, the use of the mark "made in" as a barrier to trade, and the role of the brand and the image of the country in the era of e-commerce. In "City Branding: an Effective Assertion of Identity or a Transitory Marketing Trick?" (Kavaratzis & Ashworth, 2006) firstly used in the development of the theory and practice of marketing to create a modern image of the city to determine the values of city branding, critically examine its current use to create the prerequisites subsequent construction of an effective strategy for local branding.

The fact that the unique and distinctive destinations brand helps to stand out, increases the value, preference in use, creates a strong loyalty of consumers, provokes an emotional connection between the consumer and the brand, resulting in greater loyalty and trust is described in the studies of Sirgy (1991), Fournier (1998) and Landon (1974). The studies of Dinnie (2008), McCracken (1988), McAlexander and Schouten (1998), Porter (1998), Mark and Pearson (2001), Muciz and O'Guinn (2001), Kotler and Gertner (2002), etc. can be noted among the most famous studies aimed at analyzing the formation of country branding and branding of tourist destinations.

The theoretical and methodological foundations of branding were established, variety of approaches and aspects of forming the country brand and the brand of tourist destinations were offered by the studies of Papadopoulos and Heslop (2002), Gilmore (2002), Garsten and Hasselström (2004), Holt (2004), Wipperfurth (2005), Askegaard (2006), Ekinci and Hosany (2006), Olins (2008), Usakli and Baloglu (2011) and Chen and Phou (2013). However, the experience needs to rethink and develop branding strategies in relation to the Republic of Kazakhstan, aimed at the implementation of strategic plans for tourism development in the regions of the country, forecasting tourist arrivals and increasing the profitability of enterprises in the tourism sector.

### 3. Methodology and Results

This study applied a survey research design. A self-administered questionnaire was developed based on the literature review, scale development procedure. Both close and open-ended questions were used in the questionnaire to collect the required quantitative and qualitative data for the study.

An expert survey was conducted to determine the perception peculiarities of the Republic of Kazakhstan as a tourist destination abroad, where 74% were representatives of the European countries, 17% - Asia, 8% - North America and 4% - Australia. The scientists (50%) were presented among the respondents, 17% of respondents presented the business sector, 8% - culture, and remaining 25% were from other various sectors. Gender representation of the experts was as follows: men - 71% women - 29%.

According to scientific research of Aaker (1999) in the context of brand management, brand identity design refers to the "totality of human characteristics associated with the brand." Although the brand personality has been recognized as an important part of branding, few scholars and practitioners have tried to identify the individual characteristics of tourism destinations (Usakli & Baloglu, 2011). Talking about expression and originality of individuality, for majority of experts (58.33%) Kazakhstan is a mysterious country, 37.5% - beautiful, while - 33% considered it as promising (Table 1).

It is regrettable that respondents did not perceive Kazakhstan as open and tolerant country. Meanwhile, in experts' views, Kazakhstan is not considered as an aggressive country. There is a positive side in such fact. A very low percentage of respondents (4.17%) noted Kazakhstan as a friendly, peaceful, dynamically developing country. Only 8% noted Kazakhstan as a progressive country, 13% -

as a rich country. Structure of expert answers suggests a lack of awareness of foreign countries about the history, culture and the real potential of the country. Furthermore, probably the "stan" suffix, being a characteristic of the majority of the Central Asian countries, causes some negative connotations associated with political instability and wars. Kazakhstan cannot be considered as such country, since it was the only country that voluntarily renounced nuclear weapons, adhering to peaceful solutions to political and economic issues of the country in the year of declaration of independence (1991). Today over 100 nationalities, representatives of various faiths live peacefully in Kazakhstan.

*Table 1: Expert's opinion of the adjectives most appropriate for the characteristics of Kazakhstan*

Answers variety	% of responses
Beautiful	37,55
Calm	4,17%
Dynamic	4,17%
Peaceful	4,17%
Mysterious	58,33%
Aggressive	0,00%
Open	0,00%
Tolerant	0,00%
Youthful	4,17%
Progressive	8,33%
Promising	33,33%
Rich	12,5%
Other version	20,83%

Evaluating the tourism opportunities of Kazakhstan, virtually all experts praised the rich (4 to 7 points) natural potential (Table 2). Moreover, all respondents indicated integrity of the nature (4-7 points), suitable for active and eco-tourism (both 5-7 points).

*Table 2: Evaluation of opinions about Kazakhstan*

№	Kazakhstan - is	Strongly Disagree			Convinced				Do not know
		1	2	3	4	5	6	7	
1	A country with a rich nature	0,00	0,00	0,00	16,67	20,83	16,67	37,5	8,33
2	A country with unspoiled nature	0,00	0,00	0,00	20,83	12,5	37,5	20,83	8,33
3	A country of the steppes	0,00	0,00	0,00	12,5	8,33	20,83	41,67	16,67
4	The country is rich of historical heritage	0,00	4,17	8,33	0,00	20,83	25,0	37,5	4,17
5	The country is rich of cultural attractions	0,00	0,00	16,67	16,67	16,67	16,67	25,0	8,33
6	The country with friendly and hospitable people	0,00	0,00	8,33	16,67	20,83	33,33	12,5	8,33
7	The country is attractive for active tourism	4,17	4,17	4,17	0,00	33,33	33,33	8,33	12,5
8	The country is attractive for ecological tourism	4,17	0,00	12,5	0,00	29,17	33,33	12,5	8,33
9	The country is attractive for beach tourism	25,00	16,67	8,33	20,83	8,33	0,00	8,33	12,5
10	The country is attractive for cultural tourism	0,00	0,00	8,33	16,67	20,83	29,17	16,67	8,33
11	The country is attractive for city tourism	20,83	16,67	4,17	4,17	20,83	20,83	4,17	8,33
12	The country is attractive for sport tourism	16,67	0,00	16,67	8,33	25,0	12,5	4,17	16,67
8	The country is a friendly for family vacations	16,67	12,5	8,33	8,33	25,0	0,00	8,33	20,83
9	The country is attractive to rest and leisure	16,67	4,17	8,33	8,33	25,0	25,0	4,17	8,33
10	The country with rich good cuisine	4,17	0,00	16,67	8,33	29,17	20,83	8,33	12,5
11	The country with interesting traditions and rituals	0,00	0,00	0,00	20,83	16,67	29,17	20,83	12,5
12	A country with interesting cities	4,17	4,17	4,17	16,67	16,67	29,17	4,17	20,83
13	The country is attractive to elderly tourists	12,5	12,5	16,67	0,00	16,67	16,67	8,33	16,67
14	The country is attractive for young travelers	0,00	0,00	4,17	20,83	12,5	37,5	16,67	8,33
15	A multinational country - a mixture of cultures	0,00	8,33	0,00	16,67	29,17	8,33	20,83	16,67
16	Dynamically developing country	8,33	4,17	4,17	8,33	8,33	25,0	29,17	12,5

Most experts consider Kazakhstan as a country of steppes (4-7 points), which has a rich historical and cultural heritage (both 3-7 points) with interesting traditions and customs (4-7 points). A positive aspect is that the respondents noted the friendliness and hospitality of the local population, since it is a feature of Kazakh people hospitality.

The dispersion of responses indicated a lack of awareness which is observed in respect of Kazakhstan opportunities related to urban, sport, and beach, therapeutic and gastronomic tourism. According to experts, consumers of Kazakhstan tourism services are represented by young travelers (3-7 points) in comparison to older tourists and families (both 1-7 points).

Assessment of the development level of tourism infrastructure in Kazakhstan by experts proved to be very controversial. All evaluation of the quality of placements, transport services, opportunities for shopping, entertainment, sports places and spa facilities, health care, communication in foreign languages, quality of service settled on a scale of 1 to 7 points, which, most likely, is a sign of the lack of tourism experience in the country.

In general, the analysis of experts' responses have been very encouraging with regard to the image of Kazakhstan as a tourist destination, which is determined by the presence of positive characteristics (good natural and recreational potential, presence of historical heritage, rich cultural traditions, as well as the friendliness of the local population). Another great hope for the development of a positive image is provided by 70% of respondents' willingness to visit Kazakhstan.

Meanwhile, study shows the need to develop a strategy of active expansion of information provision about the country, its history and development, cultural values, today's opportunities through existing channels: media, internet, social networks, and publications, contributing to the creation of unique offers and creating a positive attitude towards it.

#### 4. Conclusion

Brand Building of Republic of Kazakhstan and the creation of a positive image - is the strongest tool to increase the attractiveness for foreign tourists, is the formation of the image and attractiveness of Kazakhstan as a tourist destination in the world community, based on the individual characteristics of the national culture and traditions. It should promote recognition of the country in the international community, the positioning in the consumer minds, providing demand for tourist services inbound and domestic tourists and thus contribute to maximize the use of the tourist potential of the country. In addition, the formation of the brand of Kazakhstan as a factor in long-term development of the tourism industry will favorably influence the social dimension: the creation of jobs; improving the living standards of the population; revival of local cultural values, traditions, customs, traditional crafts; protection and restoration of local cultural heritage, etc.

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## European tax structures – Are we on the Right Track?

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### **Abstract**

This paper considers the EU countries' taxation structure and growth issues. Designing a "high-quality" and "growth-friendly" taxation system became an important issue in the EU after the Great Recession. The Commission recommends shifting the taxation burden from "labor to consumption" to boost economic growth and budget sustainability.

This paper considers theoretical foundations for designing efficient taxation structure and provides a literature overview of recent empirical studies. The studies demonstrate controversial results, as the influence of tax structure on growth remains inconclusive.

The second part of the paper focuses on the taxation composition trends during the last 15 years. There are hardly any significant changes in taxation structure during that period across EU countries. The third part of the paper provides statistical evidence that taxation structure has an impact on growth during the long period; however, in the short run taxation structure and growth are not statistically related.

### **Keywords**

Taxation, tax structure, European Union

## 1. Introduction

Slow economic growth and rise of public debt has forced European societies to start paying attention on governments' budget sustainability. Europe's general interest is to find proper instruments and develop economic measures to give a new *momentum* for long term growth and development.

One of the components for favoring economic growth is country's tax system. Taxes have various characteristics and functions, which have been amply studied throughout the centuries. The economists agree that taxes have impacts on individuals and companies' behavior, investment decisions and income distribution. However, there are major disagreements in the size and scope of taxes and wide possibilities to calibrate the tax policies for various specific purposes.

When considering taxation, two issues should be clearly distinguished. First, characteristics of individual taxes, and second the tax system as comprehensive structure by itself. By the tax structure we mean a proportion of certain taxes in total taxation.

When various individual characteristics of taxes and their impact of economic behavior has studied extensively, then the impact of tax structure on growth is relatively new area of studies. In the European context, the tax structure became a topical issue in the post - Great Recession period. Although the EU has demonstrated its preferences for use of certain type of taxes during a long period, more serious attention to tax structure is forced by the necessity to lead European economy on the growth path.

Starting from 2011, the EU Commission clearly articulated a recommendation to develop a "high-quality" and "growth-friendly" taxation system (European Commission, 2011a-b; Taxation trends, 2013; Prammer, 2011; Nicodeme, 2015). Besides other elements, one of the main components of that strategy is a recommendation to shift structure of the taxation. The EU Commission has found that tax burden across European countries is rather high to compare with many other regions. In addition, the Commission also argues that many European countries tax composition is inefficient from the growth prospective. The main tax problem is a high tax burden on labor. Taxes on labor cover more than half of European countries of all collected taxes. Therefore, focus on labor taxes is logical and deserves a position of the highest priority on European taxation policy.

To cope with high tax burden on labor activities, the EU Commission is calling to shift tax burden away from labor to other type of taxes (European Commission, 2011a-b). According to this understanding, the countries should burden more consumption activities, environmental resources and property. Theoretical ground for such a recommendation has emerged from various empirical studies, conducted by different international organizations and institutions. In the next section of the paper will be given a short overview of those studies.

Considering the EU Commission policy framework on tax structure, the paper analyses changes in European countries tax structure during the period 2000-2014. The main interest of the paper is the relationship between tax structure and real growth rate. The study period is remarkable – within the period the number of EU membership countries doubled, while both fascinating growth and dramatic global recession took place. What happened at the same time with tax structure? The paper describes main trends in the EU tax structure and tries to find statistical evidence between growth and taxation structure.

The paper includes three sections. The first section provides a structured overview of empirical studies on the relationship between tax structure and economic growth. Certain specific circumstances will be pointed out, which should be taken into consideration when designing European taxation structure policies. The second section provides an overview of general trends of tax structure dynamics in Europe

during the last decades. The third section presents a regression analyses to demonstrate the relationship between growth and different taxation indicators.

## 2. Theoretical Ground for Optimal Taxation Structure

There are several widely recognized classifications of taxes - *e.g.* provided by OECD and the European Union (*e.g.* European Commission 2013; OECD 2012). In this text, the taxes are classified, based on ESA2010 accounts system. The taxes are classified as taxes on production and imports (code D.2, also named as indirect taxes); taxes on income and wealth and capital taxes (D.5, also named as direct taxes); and compulsory social security contributions (D.6, shortened in the text as SSC). Indirect taxes are value-added taxes (VAT); excise duties (*e.g.* on alcohol and tobacco) and other consumption related taxes. Below in the paper will be used division of D.2 / D.5, which result named as *ratio*. Social security contributions (SSC) include compulsory and voluntary payments to the social security funds, made both by employees and by employers.

Another classification of tax structure grounds on a taxation base. There are generally four bases for taxation – consumption, labor and capital. Consumption taxes are rather close with the production taxes. Therefore in the text have used those term as synonyms. Labor taxes are summing up personal income taxes and social security contributions, related with work activities. Capital taxation includes taxes on profits and other related revenues.

As mentioned above, taxation studies are focusing mainly on individual characteristics of particular taxes. Taxes have different qualities – *e.g.* revenue collection capacity or behavioral impact on economic subjects. Some taxes are considered to make more harm on growth prospective (*e.g.* profit taxes), some are more neutral in this aspect (*e.g.* property taxes). OECD studies have ranked taxed by their “harm”, made on economic growth. By Johansson, “corporate taxes are found to be most harmful for growth, followed by personal income taxes, and then consumption taxes. Recurrent taxes on immovable property appear to have the least impact” (Johansson, 2008).

This paper is focusing on impact of tax structure on growth, not on the particularities of individual taxes. Despite the “evil” nature of most of taxes, nevertheless, societies have to use various types of taxes. The reason is simple – different taxes carry into effect different functions. There is no one single tax invented yet, which fulfills all positive aspects of taxation, having high fiscal capability as well redistributive and regulative characteristics. Societies need various taxes, which accomplish different tasks. Societies cannot abolish “most harmful” taxes, because there is no substitute tax for collection or redistributive purposes. Overburdening of “more growth friendly” taxes may distort economic activities even more than balanced set of taxes. Thus, there should be a “tradeoff” among different taxes with different characteristics. Tax system’s “focus” on growth may undermine redistributive issues and *vice versa*.

Therefore, specific set of chosen taxes in every country inevitably includes also the “most harmful” taxes. Therefore, the only “relevant” question is what is the optimal combination of different taxes in particular country’s perspective?

How is tax structure related to economic growth? There are different opinions, based on various empirical studies. Perhaps, the general understanding is that statistical relationship between tax structure and growth is “inconclusive”. It cannot be said with full conformity, that shift towards more use of consumption taxes generates also sustainable economic growth. There is a certain evidence, that some of the taxes are more harmful for growth than others (see below Arnold and Johansson), but the same authors recognize that “practical tax reform requires a balance between the aims of efficiency, equity, simplicity and revenue raising” (Johansson, 2008)

The Table 1 gives a compact overview of empirical research about taxation structure and growth relationship. In frames of given format of the paper, only main outcomes aspects of named studies are highlighted. Various empirical studies provide different results. As we can see, the general outcome is rather inconclusive. There are studies available, which favor shift from income (labor) taxes to consumption in purposes to support growth. Other studies argue that such a shift is irrelevant.

Table 1. Empirical studies on taxation structure

Authors, year and Institution	Period of study	Countries involved	Growth indicator	Short conclusions (given on abstract or summary)
Arnold (2008)	1971-2004	21 OECD countries	<i>Annual change LnGDP per capita</i>	"The results of the analysis suggest that income taxes are generally associated with lower economic growth than taxes on consumption and property. Property taxes, and particularly recurrent taxes on immovable property, seem to be the most growth-friendly, followed by consumption taxes and then by personal income taxes. Corporate income taxes appear to have the most negative effect on GDP per capita."
Johansson, Heady, Arnold, Brys & Vartia (2008)	1970-2005	21 OECD countries	<i>Annual change LnGDP per capita</i>	Same as Arnold (2008) and in addition: "While the paper focuses on how taxes affect growth, it recognizes that practical tax reform requires a balance between the aims of efficiency, equity, simplicity and revenue raising".
Martinez-Vazquez, Vulovic & Liu, (2010)	1972-2005	116	<i>Annual GDP growth rate</i>	"the choice between direct and indirect forms of taxation may be not so clear. While lowering the direct to indirect tax ratio. it would bring advantages of terms of economic growth....it would also dampen the ability to rely on automatic stabilizers for the macro economy and...reduce the scope or ability for income redistribution policies" p. 43
Prammer (2011)				"...paper reflects on behavioral responses of economic agents to taxation and reviews the literature on the impact of tax structures on growth. It analyses the tax structure in the EU-27 Member States and assess if the crises has triggered a move towards tax systems more conducive to growth"
Acosta-Ormaechea & Yoo (2012)	20 year period during 1970-2009	69, Grouped as low, medium and high income countries	<i>Real growth rate per capita</i>	"We find that increasing income taxes while reducing consumption and property taxes is associated with slower growth over the long run. We also find that: (1) among income taxes, social security contributions and personal income taxes have a stronger negative association with growth than corporate income taxes; (2) a shift from income taxes to property taxes has a strong positive association with growth; (3) a reduction in income taxes while increasing value added and sales taxes is also associated with faster growth."
Xing, J. (2012)	1970-2004	17 OECD countries	<i>Annual change LnGDP per capita</i>	"We do not obtain compelling evidence favoring consumption taxes over income taxes, or favoring personal income taxes over corporate income taxes"
Shinohara, M. (2014)				Structural overview of various empirical research
Arachi, G., Bucci, V. and A. Casarico (2015)	1965-2011	OECD countries	<i>Annual change LnGDP per capita</i>	"When tax ratios are used, there is some evidence of a negative impact of labour taxation on long-run income.... Turning to the short run, the research presented here finds strong evidence of a positive effect on per capita income of a tax shift from labour and capital taxation towards consumption taxation...."
Nicodeme (2015)				"What has prevented Member States from pursuing more substantial tax shifts? there are two main types of constraints: redistribution and competitiveness concerns" pp.13-14

By the authors' position, there is no existing "golden rule" for tax optimality. Every country requires unique and particular tax system. Every country's tax structure has three specific faces – it is country society's specific, economic policy specific and business cycle specific. Those three postulates make every country's tax structure unique. As emphasized by Martinez-Vazquez: "optimal tax literature never provided quick or exact recipes to be followed optimal tax design requires the use of both direct and indirect taxes leaving open what the optimal tax mix should be" (Martinez-Vazquez, 2010, p. 43).

### 3. Empirical Studies and Practical Issues

To widen empirical studies on tax structure "practicality" for countries tax policy options, we have to consider theoretical foundations in a broader context.

First, as was mentioned, the EU Commission recommends a shift from labor to consumption. From that standpoint logically follows that final stage of this process means full replacement of labor and income taxes with consumption and property taxes. However, such a situation is definitely not imaginable on economic, political or societal point of view. Hence – what is the practical recommendations for the countries' tax policy makers? Therefore, such a constraint leads to discussions over optimal tax composition. That is, the purpose might be defining something "steady state" like situation, which can be characterized as "optimal". Consequently, the question of tax optimality remains always as open-ended issue, which depends on country specific factors and thus limits the strength of the general EU policies on tax structure.

Second, most of the studies cover country data from early 1970s until the first years of 2000s. That is - the study period ends with relatively stable and high growth years in the global context. Contrastingly, that period is rather different from the recent decade. Earlier empirical studies do not include severe crisis periods such as 2008-2010, known as the Great Recession. The recommendations like "shift from income taxation to consumption taxation" may not work in the "new normality". Therefore, we do not have clear evidence if the countries with "growth-friendly" tax structure have survived severe crisis more easily than those countries where income taxation prevails over consumption taxes (see below). One kind of taxation system may work in stable growth situation, but not in other circumstances. Intuitively, we saw that the countries with high income tax ratio (*e.g.* Nordic countries) went through recession more easily than high consumption taxation-dependent countries (like the Baltic countries). Third, the study expects that all expenditure on physical and human capital made only based on current tax revenues. However, there are certainly various other sources for public expenditures. For example – public borrowing or receiving fiscal donations from international organizations. Countries with high growth rate and "right tax structure" may accumulate public debts at the same time (like Greece).

Similarly, the new EU members are receiving currently massive amount of the EU structural fund's donations, which boosts their economic growth. External and "free" fiscal resources allow those counties to keep taxation burden relatively low in comparison with the old EU countries. Also, the new EU membership countries were forced to increase their consumption taxes in accordance with the EU taxation directives. To compensate increasing consumption taxation burden, most of new EU members reduced their income taxes. That combination boosted economic growth and shifted tax structure on the "right" direction; however, such a situation is not sustainable in the long term.

Fourth, earlier empirical studies are based often on OECD membership countries data. Thus, very different countries are included on the empirical studies' sample. The countries are diverse by their population and territorial size, by their administrative structure (*e.g.* federal or autonomous) and many other parameters. In this context, many recommended tax shifts' are just not applicable in European countries. For example, private and voluntary health insurance system, used in the USA, just cannot be implemented in the most of small European countries. To finance welfare expenditures, the EU countries have to rely on tax revenues instead of voluntary payments like in the US. They have to

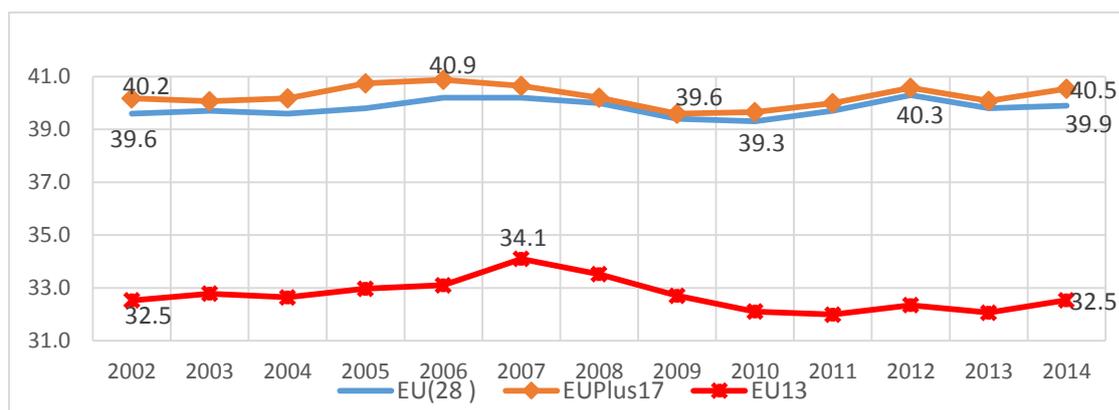
collect income taxes, because consumption taxes often cannot be used on social security needs. Once again, there are existing natural limits in shifting taxation from income to consumption.

Fifth, presented empirical studies consider the countries as “islands” in case of interaction with other countries. As an example, let us take OECD countries Chile and Finland. In consumer perspectives, they could be considered as island to each other. The consumers from one country do not go shopping in another country. Therefore, those countries tax policies might be rather independent from each other. There is no cross-border taxation impact on businesses or individual consumers. However, European countries reality is just an opposite. In the European business environment, the countries are closely interrelated with each other. They cannot implement tax policies in isolation, but have to consider other countries reaction and interact together with neighboring countries. For example, territorially closely related European countries cannot just increase the consumption taxes. That undermines their consumption tax revenues because consumers have easy access to surrounding countries markets.

#### 4. General Tax Trends in the EU

During the last decades, the EU countries’ total tax burden (including SSC) fluctuated slightly around 40% as compared with GDP level. General tax burden has remained surprisingly flat during the period (Figure 1).

Figure 1: Tax burden, % GDP



Source: Eurostat and author’s calculations

There are significant differences in tax burden between old and new EU member states<sup>1</sup>. In the EU13 countries, the tax burden has remained 8 percentage points lower during the period to compare with the EU17Plus countries. A visible convergence of the tax burden among different EU countries has not taken place yet. Despite fluctuations during the period – particularly in the new EU countries – the tax burden is about the same level in the beginning and end of the period in all indicated groups.

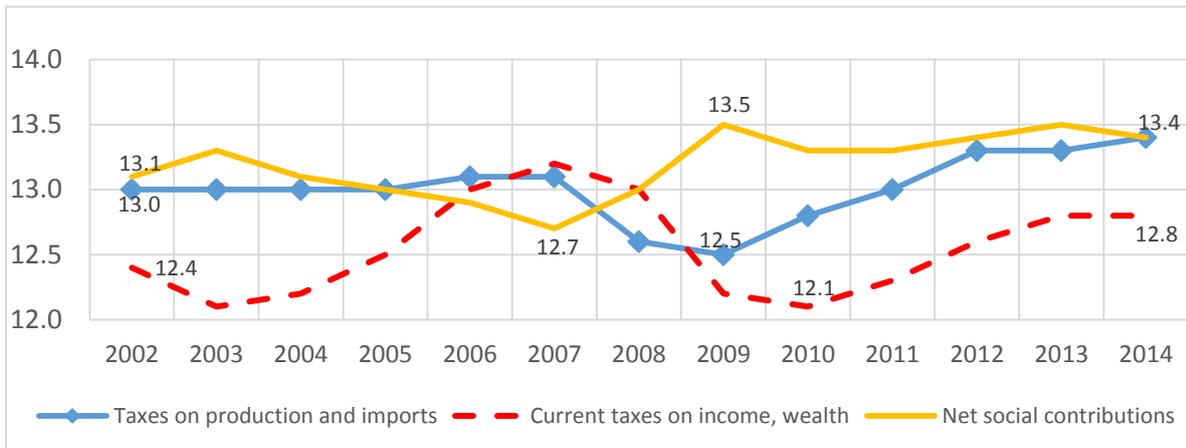
What kind of taxes are the EU countries collecting? Figure 2 presents principal tax structure as a taxes’ percentage compared with GDP.

Broadly, three major tax groups – on production, on income and social security contributions – have maintained their relative proportion in GDP comparison during the entire period. Their fluctuation amplitude has been less than one percentage point in GDP comparison!

<sup>1</sup> List of EU17Plus countries include EU membership countries before 2004 plus Norway and Iceland; the EU13 include all EU new member countries from 2004.

During the growth period, from 2002 to 2007, the consumption taxes share was practically flat, income taxes grew and SSC slightly declined.

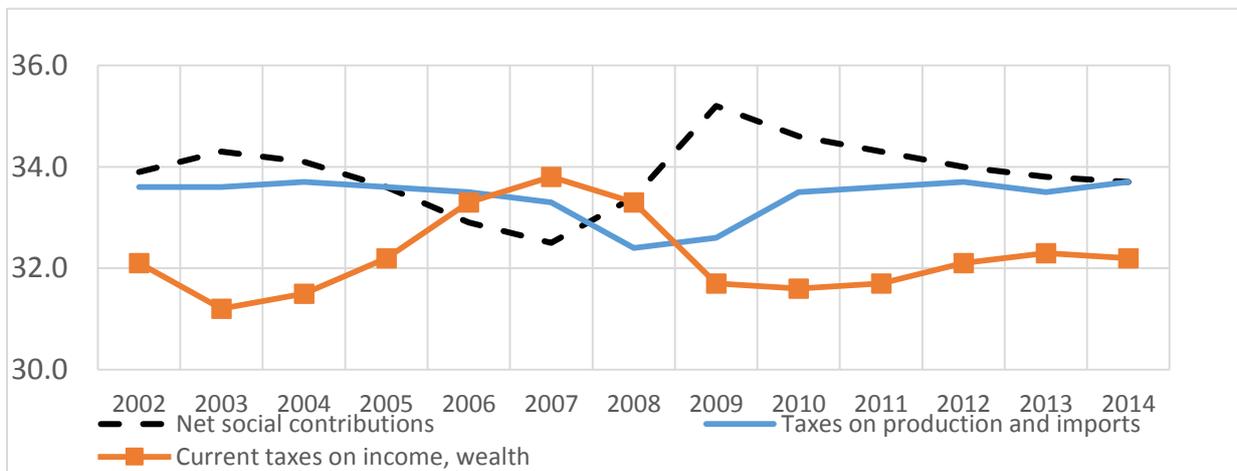
Figure 2: EU (28) countries tax structure, % of GDP



Source: Eurostat and author’s calculations

In the recession years, the SSC’s relative share increased and reached its peak on 2009. In opposite, income and consumption taxes lost their share in GDP comparison. That is in accordance with the common understanding that income tax revenue is the most vulnerable in recession periods. After the 2009, the income and consumption taxes have regained their earlier level again. Figure 3 demonstrates the EU countries taxation structure as composition of total taxes.

Figure 3: EU countries tax structure, % of total



Source: Eurostat and author’s calculations

All main tax groups – income or direct taxes; production or consumption taxes and social security contributions – cover about one third of all taxes. Such a tax structure has been rather stable during the decades.

Does the structural dynamics demonstrate move towards consumption and shifting away from the taxing labor and income? After crisis period, one can see rather similar increase of income and consumption taxes share. However, social security contributions have declined. Therefore, decline in SSC has proportionally captured by the consumption and income taxation increase. However, in the long run from 2002 to 2014, the share of all taxes in total taxes at the beginning and end of the period

is about the same. As taken altogether, the EU countries have not changed their taxation structure during the last decades.

## 5. Taxation Structure and Growth

The following focuses on finding evidence between taxation structure and growth across European countries.

The countries are differentiated on groups, based on their EU membership period. The first group, titled as EU13, consists the set of countries, which have joined the EU since 2004. Most of them are from Central and Eastern Europe.

Another group, titled as EU17Plus, includes all countries before the EU enlargement in 2004, plus Norway and Iceland. The two former countries are very closely related with the EU economic area. Table 2 provides general descriptive overview of tax structure across countries.

*Table 2: Consumption Tax structure in different countries, 2000-2014*

		Production taxes (D.2.) in GDP, %	Production taxes (D.2.) in total taxes, %	VAT/PIT <sup>1</sup> ratio
EU17Plus or "old EU"	Mean	13,74	34,97	1,002
	Std. Deviation	2,80	5,69	0,267
	Maximum	23,0	51,1	1,82
	Minimum	8,5	26,0	0,49
EU13 or "new EU"	Mean	13,50	42,00	1,863
	Std. Deviation	2,24	5,30	0,544
	Maximum	19,7	56,1	3,61
	Minimum	9,9	30,0	0,94
Total (EU28 plus Iceland and Norway)	Mean	13,64	38,00	1,373
	N	448	448	448
	Std. Deviation	2,57	6,53	0,591
	Maximum	23,0	56,1	3,61
	Minimum	8,5	26,0	0,49

1. Note: Indirect tax revenues divided by income tax revenues (D.2./D.5.)

Source: Eurostat and author's calculations

Production (consumption) taxes as compared to GDP level are rather equal across the country groups – about 13%.

Differently, there is a clear divide of the tax structure pattern, based on consumption taxes in total taxation. The new EU countries are using much more consumption taxes compared with the old EU countries' group.

The third column presents ratio consumption and income taxes. To calculate the ratio, countries' production taxes revenues (mainly VAT) is divided by income tax revenues (mainly PIT). Value of the ratio is over 1, if consumption taxes exceeds income tax revenues. In the old EU countries named taxes are about in balance; in the new EU countries consumption taxes exceeds income taxes about 1,9 times. Such an unbalanced dependency from consumption taxes may consist potential risks for public finance stability.

In the following there is considered statistical relationship between growth and various (tax) factors. The main purpose is to find evidence about statistical relationship between growth and tax structure.

As a dependent value is taken GDP real annual growth rate. The following equation is estimated:

$$GDP\ growth = \beta_0 + \beta_1 GDP\ PPS + \beta_2 Tax + \beta_3 Ratio + \beta_4 Slope + \beta_5 Debt + \beta_6 Inv + \varepsilon$$

The explanatory variables are:

<i>GDP PPS</i>	-	<i>LnGDP per capita</i> in purchasing power standards (PPS);
<i>Tax</i>	-	Taxes compared with GDP,%
<i>Ratio</i>	-	Production/ income tax ratio in a particular year (D.2.(eur)/ D.5.(eur))
<i>Slope</i>	-	Production/ income tax ratio slope last 5 years times 100
<i>Debt</i>	-	Public debt compared with GDP,%
Investment	-	Private investment compared with GDP,%

Our focus is on taxation structure indicators. There are two variables in the equation, which measure tax structure impact on growth. The first is presented by production/ income tax ratio in a particular year (see Table 2). Another variable measures *ratio's* change (shift), named as *slope* indicator. The *slope* has calculated with MS Excel function. It is interpreted as the change of production/ income ratio during the previous 5 years. That a variable captures policy measures or demonstrating tax burden shift between production and income taxes. A positive slope indicates that a country has relatively increased its collection of consumption taxes compared with income taxes. The negative figure indicates just an opposite situation.

The variables are collected over the years 2000-2014. There is a comparative European data available for that period. The period is split by two periods - named as long and short period - accordingly years 2000-2014 and 2007-2014.

The short period starts from the year, which was the peak of business cycle in the most European countries. The boom years were followed by a severe recession. Therefore, the period 2007-2014 actually demonstrates the countries capability to overcome the crises and return to sustainable growth phase. The regression equation has also assessed over mentioned countries groups. The regression results are presented in the Table 2.

Table 2: Growth rate and tax indicators

	2000-2014			2007 - 2014		
	Total	EU13	EU17Plus	Total	EU13	EU17Plus
Constant	21,851 (5,754)	30,292 (9,789)	9,948 (10,701)	-26,936 (14,137)	-42,712 (34,075)	-40,722 (18,330)
Ln GDP_ per capita_ PPS	-1,687** (0,560)	-2,807** (1,070)	-0,596 (0,944)	2,540 (1,316)	4,437 (3,507)	3,648** (1,598)
Tax burden in GDP, %	-0,023 (0,037)	0,032 (0,108)	-0,026 (0,038)	-0,077 (0,061)	-0,018 (0,183)	-0,022 (0,061)
Ratio VAT/PIT	-1,328** (0,426)	-1,755** (0,636)	0,217 (0,881)	-0,006 (0,782)	0,187 (1,297)	0,159 (1,421)
Slope5 last years	0,075** (0,023)	0,084** (0,030)	0,015 (0,053)	0,105** (0,036)	0,091** (0,047)	0,178 (0,110)
Debt in GDP, %	-0,037** (0,006)	-0,028 (0,024)	-0,036** (0,007)	-0,012 (0,010)	0,002 (0,035)	-0,004 (0,012)
Investment in GDP, %	0,087** (0,031)	0,129 (0,068)	0,047 (0,041)	0,270** (0,076)	0,297 (0,133)	0,233 (0,107)
Adjusted R <sup>2</sup>	0,207	0,185	0,127	0,157	0,102	0,155
DW	1,367	1,343	1,522	1,785	1,701	2,080
Df	352	154	196	163	71	91
F Sig.	0,000	0,000	0,000	0,000	0,042	0,002

Notes: standard errors are in parentheses, \*\* significant at 5%

Source: Eurostat and author's calculations

During the long period, from 2000 to 2014, the real growth rate is statistically related with all variables included in equation, except the tax burden. Situation across countries groups looks differently. For the group of EU17Plus only debt burden seems to be significant factor related with growth. The relatively poorer new EU countries grew faster than old EU member states, but debt and investment level has not statistically related with the growth rate.

By those results, tax structure has a positive impact on growth, except the old EU member countries. Therefore, higher tax burden on consumption instead of income supports country's growth in the long-run. When countries shifted tax burden from income to consumption is also positively related with growth. Those results are in agreement with the EU Commission position and recommendation on tax policy. However, that a relationship holds only in the new EU countries. There are also various other factors, which have supported EU13 countries fast economic growth during the named period. Initial income level on those countries was relatively lower; therefore, to obtain higher growth rates is relatively easier for them. Also, the new EU members had to harmonize their indirect (consumption) tax levels to the EU standard levels, which led to significant tax increases on VAT and other consumption taxes. To compensate the increase of tax burden in those relatively low-income societies, the personal income tax rates were decreased.

The purpose of the short run period regression calculation is to capture the Great Regression and tax structure interrelations. During the period 2007-2014, the taxation changed significantly to compare with earlier years.

Most of variables, which were significant in the long period lost their statistical significance in the short term regression. On the other hand, investment ratio became significant in all countries groups and GDP *per capita* level became important in the old EU countries. Perhaps, richer countries were able to support and stimulate economic activities more than the new EU countries. As regression outcomes demonstrate, during the short-run the tax structure is statistically not related with growth. Tax shift impact on growth is weakly related only in the new EU countries.

## Summary

The paper discusses the relationship between tax structure and economic growth. According to empirical studies, certain taxes (*e.g.* profit taxes) hamper economic growth more than others do (*e.g.* consumption or property taxes). The paper provides a regression analysis to find evidence between growth and tax structure. The results demonstrate that there is evidence that in European context taxation structure has a positive impact on growth during the long period. In the shorter period the statistical significance between taxation structure and growth rate disappears.

The paper has given arguments, questioning the EU tax policy recommendation for tax shift impact on growth. The EU Commission policy favors tax burden shift from income taxes towards consumption to support economic growth. By author's position, such a recommendation is not universal. The tax structure is rather country-specific and general recommendations for tax shift are not universally applicable. To consider also countries coping with the recent global crisis, we do not have any evidence that countries with the "right" taxation structure came through recession more easily and recovered faster than countries with high income taxation levels.

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## Organisational Characteristics and CRM Readiness in SMTEs of the Eastern Cape, South Africa

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### Extended abstract

#### Introduction

The purpose of this study was to explore the organizational characteristics of small to medium tourism enterprises (SMTEs) in the Eastern Cape (EC) of South Africa (SA) and their influence on Customer Relationship Management (CRM) readiness. The role of entrepreneurship in SMTEs is well recognized and acknowledged as a significant contributor to economic development and employment opportunities. Worldwide, SMTEs play a dominant role in the tourism industry. These businesses are often vulnerable to external economic forces and find it increasingly difficult to transform their strategic, operational and organizational management to face the challenges placed upon them. This study focused on SMTEs in the EC province, which is economically the poorest province of SA. The general characteristics of the respondent organizations, followed by the characteristics of the managers are reported.

#### Literature

CRM has become of pivotal importance to many organizations as businesses strive for competitive advantages through building relationships with their customers, improve customer services, enhance customer retention and ultimately improve business performance, small businesses often need assistance and effecting this complex relationship. Successful CRM requires management support and commitment of resources such as time, money, training and technology. CRM readiness is also impacted by the characteristics of the organization, such as its size and shape. CRM often fails because of a lack of definition and a narrow focus. While a number of studies investigated the implementation of CRM, very little effort has been made to determine organizational readiness at the CRM pre-implementation stage. This also appears to be the case in the South African context. Past research into CRM focused mainly on financial services, banking services, knowledge management, customer strategies and customer loyalty, but did not investigate small business readiness in a tourism context. This research aimed to help fill this void by identifying and assessing the factors preceding CRM readiness as well as determine the readiness of a sample of South African SMTEs. The study further examined the factors impacting CRM readiness in the context of SMTEs in the EC.

#### Method

The multivariate technique of exploratory factor analysis was used to assess the discriminant validity of the measuring instrument. Five factors with a positive impact on CRM were identified from the exploratory factor analysis of the data. The factors were business strategy; customer strategy; touch points; competencies, skills and technology; and perceived business performance. Cronbach's alpha coefficients were calculated to establish whether the factor scores were reliable with acceptable internal consistency. Relationships between the factors and demographic variables are reported. Quantitative research was deemed appropriate for this study. The sample of 332 respondent organizations were chosen from the 2012 database of the Eastern Cape Parks and Tourism Board. The

database consisted of formally registered SMTEs of which 310 were usable questionnaires. Systematic sampling was employed. Both descriptive and inferential statistics were used in the study.

### **Results and Conclusion**

The research results supported an overall statistically significant association between CRM readiness and business strategy; customer strategy; touch points and competencies, skills and technology. Further, relationships were also explored among CRM factors and demographic characteristics. The study contributed to an improved understanding of the factors that will enable SMTEs to engage in CRM activities and lead organizations to CRM readiness. The study established a profile of SMTEs in the EC which can serve as a basis for future research.

### **Relevance to Industry**

This research has made a contribution toward a largely under-researched area concerning CRM in SMTEs. It is recommended that future researchers conduct a longitudinal study and investigate other factors which impact CRM.

### **Keywords**

Customer relationship management, Eastern Cape, Small to Medium Tourism Enterprises

## Key Success Factors for Thai Cashless Society

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### Background

Payments is a significant customer need and one of the cornerstones of any financial system and economy. An effective payment system would potentially provide the backbone of economy structure, business growth and trade activities and enhancement in financial inclusion as well as financial literacy. Globally, we can claim that many developed countries are moving toward cashless society which leads to several explicit benefits including safeness, transparency and convenience. Over the last decade, Thai payment system has experienced dramatic changes, mainly driven by innovation, government roadmap<sup>1</sup>, leading to an increase in the degree of electrification in payment. There have been some remarkable achievements in Thai payments such as passing of royal decree regulating electronic payment service and setting barcode standards for bill payment. Although several successes can be seen and the goal of Thai cashless society has been set, there is one important question regarding factors that would practically stimulate consumer to shift from paper-based payment to e-payment. Since there are several differences between those developed countries and emerging market, including Thailand, the route and essential factors that are required to achieve an ultimate goal of non-cash society is expected to be different as each country is placing in different stage of cashless advancement.

### Literature Review

Theoretically, Keynes (1936) introduced liquidity preference theory predicted the fluctuation in velocity and focused on the motives that make people hold money, namely transactions motive, precautionary motive and speculative motive. Although, there are many studies (Rinaldi, 2001; Yilmazkuday, 2007; Anderson-Reid, 2008; Amromin & Chakravorti, 2009) worldwide found that cash could be gradually substituted by the use of card. Another study by Snellman, Vesala and Humphrey (2001) illustrated that the substitution effect is different for each country due to several factors such as payment technology and cultural pattern. They have also mentioned that to make behavioral adjustment, it takes time so they named this period as a “learning period”

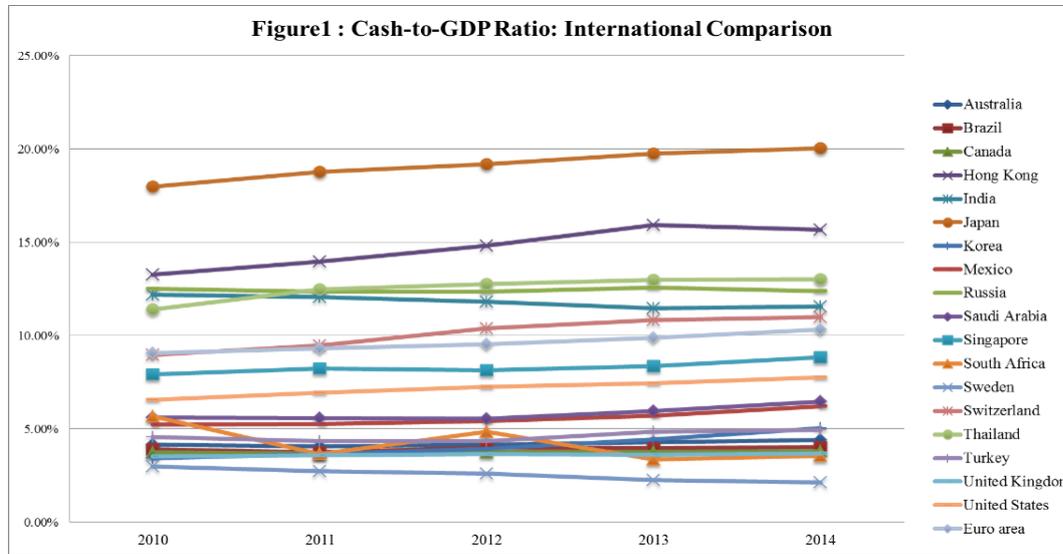
### Overview of Thai Payment

Internationally, Thailand has been considered as a cash society since the percentage of cash per GDP was relatively high. One indicator of cash usage is the ratio of the value currency and coin in circulation to the value of GDP. Figure 1 illustrates Cash-to-GDP ratio across 19 regions from 2010-2014. As presented in figure 1, the Cash-to-GDP ratio of Thailand was really high compared to other countries especially United State of America and some European developed countries including Sweden and United Kingdom. Interestingly, despite an advance in economy and payment systems in some Asian countries such as India and Japan, we are able to observe high ratio among these Asian countries especially in Japan approximately 20 percent. The reason being that could be an influence of national culture. Even through, Thai Cash-to-GDP ratio slightly rises over the past 5 years, some portion of cash consumption in Thailand might be replaced by an increase in non-cash payment instrument usage including credit card, debit card and stored-value card. Figure 2 and figure 3 portray the trend of electronic payment usage

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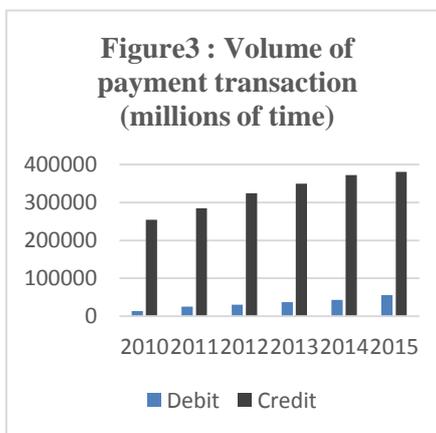
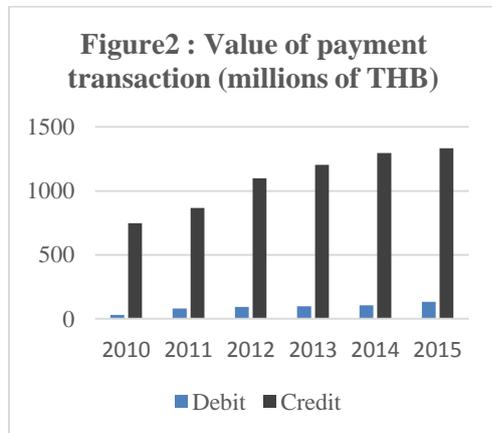
<sup>1</sup> The 2012-2016 payment roadmap: consists of three main objectives, which are efficiency enhancement, risk reduction and consumer protection.

in Thailand from 2010-2015 in terms of value and number of transactions respectively. As presented in figure 2, there was a great increase in the value of credit card usage. From 2010, credit card has been recorded as the highest share among these cashless payment instruments, which is different from some European countries which generally dominated by debit card.



Source: Bank for international settlement (BIS), Bank of Thailand, dataset EC\_MB\_004\_S2

Similarly, as for the volume of transaction, the volume of credit card has gained the largest portion during that same period. An increasing statistic in value and volume of these innovative instruments is not a whole new phenomenon for Thai economy, due to a fast development in an expansion of payment infrastructure and settlement network.



Source: Bank of Thailand, dataset PS\_PT\_004 and dataset PS\_PT\_005

Given some notable development of the payment system mention above, there are still some key gaps and consideration that needed to be addressed. The examples of them are:

National level	Individual level
Limitation of penetration of some electronic payment instrument	High usage of cheque and cash in cooperate payment
Low point of sale terminal	Low debit card usage compared to credit card
Cash society (statistically account for approximately 10 percent of GDP)	The level of population financial literacy.
Weak practical law and regulation regarding payment system	Ageing society (risk averse in technological payment instrument)

### Benefits of the cashless society

Broadly speaking, the aim to reshape Thai payment system and consumer payment behavior has creating opportunities and challenges for many players including financial institutions (banks and non-banks), regulator and policy maker. Although significant amount of initial cost, maintenance fee and resources are required in preparing the cash-free system, greater amount of benefits could be anticipated to see for Thai economy. First and foremost, for consumer, there is a lower cost in carrying cash and an elimination in the opportunity cost of holding them, also an increase in the level of convenience through anywhere and anytime payment. Next, we can surely observe a true numerical benefit for banking industry especially for central bank as there is a saving on cash printing cost and cash handing cost. Moreover, for corporates, e-payment system allows them to save cost on paper-based invoicing, printing and handing as well. Last but not least, the level of payment and settlement safeness and transparency is likely to increase nationwide and revenue department could partially benefit from the level of transaction transparency as well.

### Key Success Factors

The study attempts to analyst the factors that would affect the change in the usage of payment instrument from cash to non-cash instrument. As discussed in the previous section, the benefits seem to outweigh the cost. Hence, in this section we will discuss about factors that would drive Thailand toward cashless society, in response to government roadmap, mainly in general aspects from various perspectives. Those key factors can be simply called “3C” to success namely coordination, cost and confidence.

To begin with, with a fast development in payment technology and consumer payment behavior, the shifting in consumer behavior toward cashless society could be driven by “**coordination**” between industry’s players and stakeholders. Even if the cashless payment roadmap is there but practical coordination in operational level is a different story. To be more specific, this coordination required government bodies and private entities such as the Bank of Thailand, revenue department and Thai banker association to work together in promoting national campaign, aligning supervisory process and establish related legal framework. The goods new is that some initiatives and projects have been already underway. The examples are as follow:

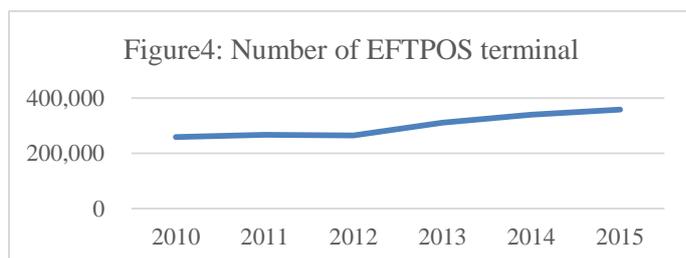
Local Switching Systems	The systems technically enhance the soundness of Thai payment system, introduce a reduction in cost to Thai service provider and promote the use of debit card. The system was ready in 2013 for debit card.
Payment Finality	The act or legal guidance would systematically ensure the finality of the transaction. This could potentially reduce systemic impact of the counter party transaction.
Preparing for AEC	As Thailand actively participates in Asian Economic Community (AEC), Thai systems seems to support the AEC integration, allowing an efficient in cross-border transaction and capital market settlement.

Although, there are some hand-on progresses of coordination from government entities, there are still works left to be done to mechanically prepare the country for the foreseeable growth in e-payment use as set by the road map. First and foremost, government and industries (i.e. banks and non-banks) need to work continuously together to achieve a long term goal in promoting of e-payment usage. To win around 70 million people heart or convince them to change from cash to card, both need to ensure to people safeness and consumer protection. For example, they should drive national campaign and communicate nationwide to promote and introduce national policies, implementing by the government, and simultaneously provide practical useful financial products in accordance with those policies to satisfy customer need. In addition, regarding regulatory issue, the supervisory and oversight system need to be aligned and set to promote and invite service provider and consumer to participate in the transaction. The action is expected to reduce a redundant in compliance and promote an efficiency

for industrial players and regulators. For instance, there are some regulatory differences between banks and non-banks exist, the differences may need to be corrected for the fairness in competition. Last but not least, strengthening legal framework on electrification is one of the most crucial issue as the acceptance of electronic document in legal instances is still in doubt. All in all, the action mentioned above required a long term strong coordination between government bodies and private entities to be in place. Not only a subjective national plan but it has to be a long term sustainable work, participating by all parties or stakeholders.

In addition, given the benefits of technological payment, they could be worthless if they cannot financially outweigh the cost. The second “C” key factor is “**Cost**”. Explicitly, it is a direct transaction cost or interchange<sup>2</sup> fee that is generally being pass through to customers or card users which is around 3 percent. Fortunately, there is an initiative from the government to seriously reduce this cost by introducing a national payment system or Thai Payment Network (TPN). The network could be viewed as a local card brand competing with Visa and Master that aim to charge a more reasonable fee with the expected zero fee in the beginning years. This network seems to strongly attract merchants and retail stores and indirectly save cost for users. In addition, it also generates clear profit to government as well as it allows them to freely regulate, reaping benefit of disclosure and tax collection.

Finally, the last “C” is **convenience**. In this regard, we would discuss a convenience in using card to substitute cash. Directly, a convenience in card payment heavily depends on the availability of Electronic Fund Transfer at Point of Sale (EFTPOS). The machines are extremely needed to be distributed and be available in all taxable places. Statistically, the number of EFTPOS has grown significantly over the past 5 years. However, it is relatively low comparing with the growth in card usage. Figure 4 presented an increase in the number of EFTPOS over the past 6-year.



Source: Bank of Thailand, dataset PS\_PT\_007

With the government’s goal to distribute up to 2 million devices nationwide within the next fiscal year, we expect to see a more convenience process for Thai users. Indirectly, the level of financial literacy has played an important role to boost people confidence and provide convenience for the economy. The government and industries need to educate people and provide users necessary information to stimulate the people confidence resulting in the growing number of cashless users.

## Conclusion

We analyst key success factors for Thai cashless society that could be a long term sustainable development that provide benefits to us all. Like a stepping stone, Thailand seems to be in the right track, the “3C” key factors “**coordination**”, “**cost**” and “**convenience**” could potentially drive Thailand to achieve long term goal of cashless society and reap the benefits of it.

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## **Empirical Analysis of the Effectiveness of Acquisitions**

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### **Abstract**

The article comes up with the results of research on the effectiveness of acquisitions based on empirical analysis of transactions during the period from 2008 to 2013 on the subject of motive and type of transaction. The hypotheses about the higher effectiveness of horizontal transactions over other types, conglomerate one over domestic type and the hypothesis about the influence of particular motives on the result of the transaction were suggested and validated by the study. Also the hypothesis about the influence of market on the company's capitalization after the acquisition was introduced and wasn't confirmed by the results of the analysis.

### **Keywords**

Mergers and acquisitions, acquisition, performance evaluation, prospective method of evaluation, retrospective method of evaluation, the motives of M&A transactions, market capitalization, profitability of the transaction, synergy

## **Introduction**

In modern conditions of globalization, specialization, consolidation, liberalization of markets and technical progress one of the common methods of the company's growth is the strategy of mergers and acquisitions. This is especially true in the face of slowing down of global economic growth and organic growth of corporations' activities. In these circumstances, in order to maintain growth, capitalization, preserve the economies of scale and ensure to shareholders return on invested capital being above the market level, companies choose the way of growth through purchases, or mergers and acquisitions. Based on the objectives of the acquirer, transactions differ in type (vertical, horizontal, conglomerate) and motive, which in many cases is unique to each transaction. A common motive for all transactions is the motive to add value. We will not consider cases related to the annihilation (i.e. purchase of assets or businesses with a view to their liquidation or separation for subsequent re-sale) in his article. However, not all transactions lead to the desired results and are cost effective.

The purpose of this article is the analysis of motives and types of transactions and the evaluation of their effectiveness. The article provides the analysis of the literature on the subject of deals' motives and ways to assess the effectiveness of the transaction. The comparison of theoretical data from the literature with empirical analysis of deals were carried out.

The relevance of the topic is confirmed by modern trends in mergers and acquisitions. An increasing number of transactions are made annually and are of an international character. For example, during the period from 1991 to 2000 116 countries were called by experts as participants in the global market of cross-border mergers and acquisitions, and by 2015 the number of countries increased to 180. Moreover, the Russian market is actively developing and transactions are not limited only to the commodity sector.

In this research we analyzed the causes that influence the creation of value for shareholders as a result of the transaction. The following hypotheses were suggested: 1) horizontal transactions are more efficient; 2) domestic transactions are more efficient than cross-border ones; 3) transactions related to certain motives are more economically viable. We have found these hypotheses quite logical as they were tested in this research on the basis of the statistics and they were confirmed. During the work, another hypothesis was suggested, meaning that it is possible that the market itself has influenced the increase in the value but not the transaction. The hypothesis about the impact of market changes on the growth in the value of companies was not confirmed.

## **Methods of M&A Effectiveness Evaluation**

In economic practice, there are two methods of evaluating the effectiveness of mergers and acquisitions: the prospective and retrospective methods [1].

### **Prospective Method of Evaluation**

A prospective method of evaluating the effectiveness of mergers and acquisitions involves the comparison of the transaction costs with the cost of the target company taking into account its future cash flows. On application of this method there is uncertainty regarding expected cash inflows, the accuracy of the forecast depends on the subjective assessment of an expert, which is influenced by his professional knowledge and experience. Due to mistakes of experts there were situations when economically feasible transactions were not be implemented, since the potential of the target company was underrated.

In order that an acquirer could evaluate the effectiveness of acquisitions, it is necessary to model the type of synergy, which is planned to achieve, and to assume, from what period after the transaction it is necessary to model the achievement of synergy effects. To assess the synergic effect, the following algorithm needs to be used [18]:

- The valuation of the acquirer.
- The valuation of the target company.
- Determining the value of the combined company as the sum of the values of the acquirer and the target company.
- The definition of the synergies types (synergy of revenue, costs synergy, tax benefits, etc.).
- Identifying key periods of time, when this kind of synergy will be realized. It is possible that a synergistic effect will be revealed few months before reaching target characteristics, therefore is necessary to plan the synergies in a financial model.
- Valuation of the merged company taking into account synergic effects.
- Evaluation of the value of synergy as the difference between the value of the merged company taking into account synergy effects and the value of the merged company excluding synergies.

The complexity of applying the prospective method is that the transactions costs are made at a specific point of time, within a certain period of time, and the benefits derived from the transaction, appear in the form of profits during unlimited period of time. The costs tend to be of deterministic nature, at the same time, benefits are anticipated values.

### **Retrospective Method of Evaluation**

Retrospective method of evaluation of mergers and acquisitions involves the analysis of certain indicators of company's performance within the certain period of time after the M&A transaction. This approach primarily aims at determining the success or failure of the executed transaction. It should be noted that a retrospective method of evaluating effectiveness is primarily based on actual figures, but it does not take into account the balance of costs and obtained results [4].

Mainly American analysts carried out research on the effectiveness of mergers and acquisitions applying the retrospective method of evaluation. On the basis of these studies we can distinguish the following three types of evaluation in a retrospective method [6].

#### *1) Accounting method [7, 8, 9]*

Accounting method involves the evaluation of transactions effectiveness on the basis of accounting and performance indicators of the acquirer before and after the transaction. Comparing indicators include market share, operational performance (output, cost of goods sold), financial indicators (income, return on equity, return on assets, etc.). The main advantage of this evaluation technique is the availability of necessary data, the possibility of easy data processing and analysis. However, along with the advantages there are disadvantages of this method of evaluation, which include using historical data and, consequently, ignoring current values of indicators. In addition, this type of evaluation is based on the estimation of changes of indicators in the balance sheet of the company, which does not take into account the fact that changes can be caused by other factors unrelated to a M&A transaction. If a retrospective method is used for the analysis the certain timeframe is considered (one, two, or three years), at the same time, mergers and acquisitions may have an impact on the financial performance of the company over the longer period. This does not exclude a discrepancy between the data of the balance sheet and the true market performance of the company.

#### *2) Evaluation on the basis of the fluctuation of share prices of companies participating in the transactions (the market approach) [10, 11] or event study methodology*

This method of evaluating the effectiveness of mergers and acquisitions involves the study of reaction of the stock market on mergers and acquisitions. Using this approach to evaluate the effectiveness of transactions the analysis of changes in returns on shares (return on equity) resulting from mergers / acquisitions of companies is compared to the average return of shares of the acquirer and the target company. The main disadvantage of this method of evaluating the effectiveness of transactions is the dependence of the estimates on the selected time period. In the short-term changes of stock price are more likely to be related to economic expectations with regard to future merger or acquisition. At the same time, long-term changes in stock returns can be caused by reasons not directly associated with the process of integration of companies participating in the transaction. Therefore, when using this method it is crucial to choose the period of analysis in order to eliminate the influence of secondary factors on the return on securities.

### *3) Combined method of evaluation*

This approach combines the above-mentioned accounting method and the event study methodology and includes the following steps [12]: analysis of financial statements and results of operations of the company; analysis of the dynamics of quotations of the acquirer's shares; analysis of the connection between changes in the indicators calculated in accordance with the accounting statements, and changes in the market value of shares of the company.

## **Motives of M&A Transactions**

Currently there are four motivational theories of mergers and acquisitions.

### *The theory of synergy [13]*

The main thesis of synergy theory is the idea that the top management of the company-initiator of the transaction and the target company does mergers and acquisitions in accordance with the interests of its shareholders, ensuring their welfare. Therefore, a M&A transaction is possible only in case, if the new combined company can lead to an increase in the value of shares and, consequently, to an increase in the welfare of shareholders.

### *The theory of agency costs of free cash flows [14]*

Unlike the previous theory in the theory of Agency costs, the top management of the company, which is essentially agents of shareholders, acts only according to their own interests and not for the sake of increasing the wealth of shareholders. Thus, top management refuses to distribute the profit to shareholders, and directs it for the implementation of the strategy of mergers and acquisitions, and there is a conflict of interest.

### *Theory of pride [15]*

According to the theory of pride, the top management of the company-initiator of the transaction is often inadequately assesses the potential increase in the value of the company as a result of mergers and acquisitions. In such cases, the shareholders and top managers do not act in the interests of the rising value, but the fact and existence of the right of ownership, possession. This phenomenon was typical for acquisitions in Russia in the nineties, when the main motive of acquisition of the asset or the company was the fact of ownership.

### *Q-theory [16]*

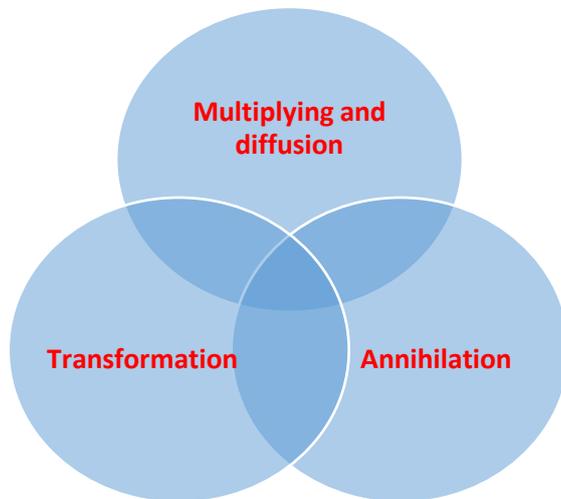
According to this theory, which is based on the Q index (capitalization of company/replacement cost of its assets), the acquisition of the target company is an investment cost for the acquirer. If the ratio  $Q > 1$ , then the company is in a position to implement mergers and acquisitions.

Table 1 shows comparison of motivational theories.

Table 1: Main aspects of the motivational theories [17]

	Theory of synergy	Theory of agency costs of free cash flows	Theory of pride	Q-theory
<b>Motives of management</b>	Growth of shareholders' welfare	Personal motives (control over distribution of free cash flows)	Personal motives (irrational behavior – pride)	Rational behavior (feasibility of transactions)
<b>Company's value</b>	Growth as a result of the synergy effect	Decrease in value	Decrease in value	Growth of value

Aside from the above-mentioned theories, it is possible to point out planned value effects in M&A, i.e. vector targets of the shareholders, their expectations for achieving value effects from mergers and acquisitions. These effects include multiplying (mathematical synergy) and diffusion (exponential growth of value – net present synergy), transformation, and annihilation – as the effect of the destruction of value.



1. Multiplying and diffusion of value is an increase in synergic value after the transaction. In this case, the transaction motives have to be creative. Merger is the prevalent form of transactions.
2. Transformation is the search for new points of growth in value through business diversification. The predominant form is the acquisition. In this aspect there is room for both relevant and irrelevant diversification
3. Annihilation is acquisition of competing companies or assets with a view to their subsequent disposal or depreciation. In this case we are talking about the strategy of indirect impact on the growth of its shareholder value through the elimination of market barriers and factors hindering the development of their own company.

### Objectives and Methods of the Research

The authors of this article have conducted an empirical analysis, whose aim was to study the motives and types of mergers and acquisitions and the evaluation of their effectiveness.

On the basis of empirical research the following hypotheses have been put forward:

- 1) Horizontal transactions are more efficient
- 2) Domestic transactions are more efficient than cross-border
- 3) To increase the company's value is influenced by the market, not the deal itself
- 4) Transactions related to certain motives that are more economically justified

In order to archive this aim deals from 2008 to 2013 were selected, all of which represent the 100% acquisitions made by public companies that were not engaged in any other transactions, and the cost of a new company adjusted to market conditions (index ST&P500) was estimated in a year period after the transaction.

### **Empirical Analysis of the M&A Effectiveness**

It is crucial to assess the effectiveness of a transaction after its implementation and in the process of the company's future performance. Due to the fact that the end goal of any acquisition is to increase stakeholders' value, we need to compare the market capitalization before and after the transaction by the means of the retrospective approach. This assessment of the M&A process is important for the determination of the goal achievement (successful or unsuccessful transaction).

In this article we propose to conduct a study of motives and types of transactions and identify those that led to the increase in the market capitalization of the acquirer.

### **Data for the Study**

To find out the typical motives and the types of transactions for the market of mergers and acquisitions, an analysis of 199 transactions of the 2008 – 2013 time periods was conducted. For the study integrity we have selected deals that are 100% acquisitions of public companies (More detailed list of transactions, see Appendix 1).

To verify the hypothesis about the impact of market conditions on the result of mergers and acquisitions an assumption about the correlation between the transaction profitability and the market capitalization of the acquirer was made. For this we used values index Standard & Poor's 500, and the cost of a new company adjusted to market conditions (index ST&P500) was estimated in a year period after the transaction.

### **The Results of the Study**

According to the results of the analysis it was found out that vertical and horizontal types accounted for the largest percentage of the selected transactions (46% and 45% respectively), while the conglomerate type comprised only 9%.

In the study we did not focus on the cross boarder type of a deal, as some authors who conducted the research on the analysis of differences in the valuation of the acquire depending on whether the buyer is from the same country or a foreign company, claim that there is no universal rule and the market reaction to the nationality of the buyer depends on the characteristics of each specific transaction. [19]

In addition to the most common motives identification, an analysis of deals' cost-effectiveness depending on a particular motive has been undertaken. The price of the acquirer's shares at the moment of the transaction and the year after was taken as an indicator of effectiveness. On the basis of this analysis an attempt was made to highlight the motives of mergers, which will most likely be economically justified.

After the transaction data examination the following deals motives were singled out:

- the motive of assets diversification,
- the motive of the product portfolio diversification,
- the motive of investments,
- the motive of getting access to new technologies,

- the motive of cost optimization,
- the motive of growth potential
- the motive of acquisition of suppliers/ manufacturers,
- the development of new deposits,
- the motive of supply channels expansion,
- the motives of the reorganization,
- the motive of market share increase
- the motive of increasing the company's value
- the motive of improving the financial situation,
- the motive of one's position in the segment improvement,
- the motive of getting a competitive advantage.

Moreover, the motive choice should be driven also by the ability of financing deals, in particular if the company has a budget of mergers and acquisitions and it exceeds the performance of its own operating revenues. This situation is risky, as the company and its cost largely depends on the success of mergers and acquisitions, and to a lesser extent from its own market efficiency.

The most common motive was the motive of increasing the market share (69 of 199), this includes the company's desire to increase its influence in the global market, acquiring a competitor, company's intention to get a leading position in the industry. The vast majority of transactions made because of this motive are cross-border, which demonstrates the intentions of companies to conquer its position on the world market. Moreover 50 deals out of 69 showed a positive growth in the share price for the year period (the maximum increase of 120%). On the basis of obtained data we can conclude that in future transactions made for the sake of increasing market share are most likely to be successful and cost-effective.

The following widespread motives were, firstly, the motive of the product portfolio diversification, which includes the reasons of the establishment of a new product or product line extension with the product range of the target company, and, secondly, the motive of potential growth, 22 transaction respectively.

14 of the 22 deals with the motive of product portfolio diversification demonstrated the positive growth of the share price. Most of the deals (17) were committed on the domestic market and only 5 transactions were international. This means that to achieve this goal, it is enough for companies to acquire local companies. Moreover, the reasonableness of this approach is demonstrated in the form of economic efficiency (3 out of 5 international transactions and 11 out of 17 local transactions showed positive growth).

Motive of potential growth reflects the results of economic efficiency of deals with the motive of product portfolio diversification (14 of 22 deals). Transactions made on the purpose of potential growth, are mostly vertical. This may be caused by the desire of companies to grow intensively, that is by cost-cutting.

The motive of investment was seen in 19 deals, 15 out of which showed a positive increase in the share price. The majority of transactions (12) was international, which may also indicate the attractiveness of the investment in certain markets, countries or companies that have been acquired. Most common type of transaction was horizontal.

The motive of segment position follows up next. This motive differs from the motive of the market share increase in the way that the motive does not focus on taking a leading position in the market, instead it refers to modifications in a particular segment. 10 out of 13 deals are horizontal that confirms

the validity of the motive. This motive has not demonstrated any significant economic efficiency, as only 6 deals have positive share price growth.

Up next comes the motive of assets diversification (11 deals). This sector is dominated by conglomerate transaction type (9 deals), which is explained by the desire of companies to invest in the non-core activities, thus diversifying its portfolio. The majority of transactions is international. This motif can be considered as economically justified, as 7 out of 11 transactions have shown positive growth in the share price.

The motive of getting access to the new technologies was singled out in 9 deals that were mostly of horizontal type. The motive can be considered economically justified as two thirds of transactions have shown positive growth in the share price. The next motive was the motive of the financial situation improvement (8 deals). The motive did not justify its name, as 5 companies showed a negative change in the stock price within a year time period.

The rest motives were quite rare. The motive of cost optimization was tracked in 7 trades, 6 of which were local and vertical and only one was horizontal and international. The motive of value increase was marked out in 6 deals, only one of which fell in share price, the motive of the restructuring – 5 trades, 4 of which showed growth, and the motive of the development of new fields, which is typical for the mining industry, - 4 transactions, 2 out of which showed upward trend.

Such motives as enhancement of competitive advantages, expansion of distribution channels, acquisition of the manufacturer and the acquisition of a supplier can be considered to be special cases, because each of them referred to one certain company.

### **Analysis of the Dependence between the Deals Profitability and the Market Capitalization**

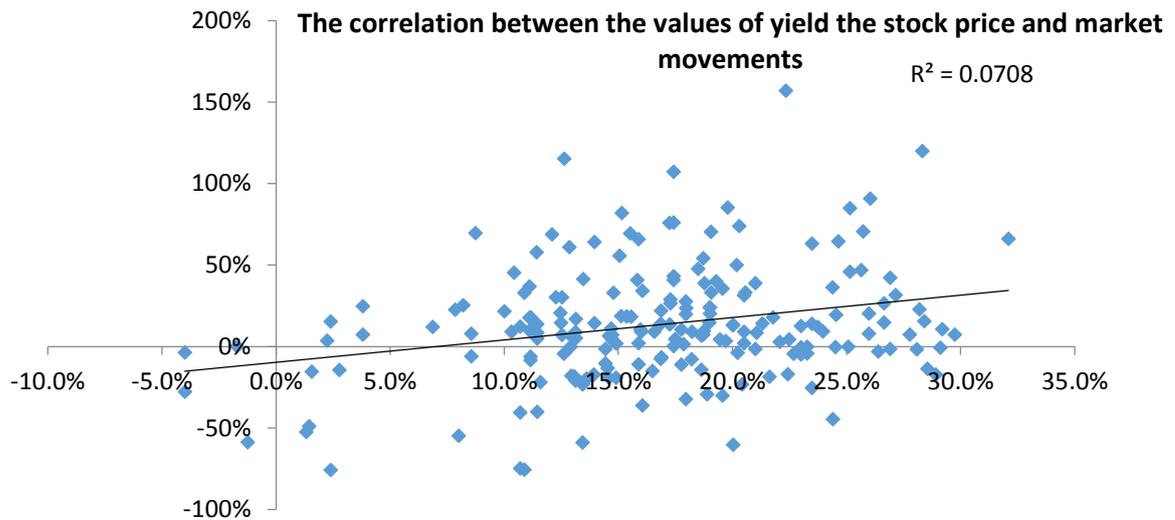
In the study we made an assumption about the dependence between the transaction profitability and market movements. In order to test this hypothesis values index Standard&Poor 500 was used.

According to results of the deals analysis with the adjustment to market capitalization only 40% of all transactions have shown positive growth, which means the number of transactions we considered to be successful has decreased significantly. We can make conclude that synergies from the transaction were less significant than the natural capitalization of the company-acquirer.

For the study integrity, we have excluded the transactions made in 2008 and 2009, because at that time the market was unstable. However, even without 2008 and 2009 deals the results of the analysis has not changed (40% showed a positive trend, 60% - negative). Based on the obtained results, it can be assumed that if the market has not had a significant effect on the results of the study, therefore it has no significant effect on the profitability of the transaction.

We analyzed the change in the value of the stock price and market capitalization of the company-acquirer to confirm or disprove our hypothesis about the dependence between the transaction profitability and market capitalization. During the research the following results were obtained (see figure 1).

Figure 1: Impact of market changes on the transaction profitability



As it can be seen from the chart, the correlation between the values of yield the stock price and market movements is close to zero, which spells the absence of any obvious dependence of one index on another.

### Conclusions

In our study we made an attempt to identify the most common motives of transactions that were declared by the companies-acquirer. As a result of transactions analysis we can conclude that it is irrational to implement the theoretical classification of motives to determine the potential synergy effects. In practice companies state the motives of mergers and acquisitions based on economic indicators, whereas, the internal psychological motives of top management and shareholders of the company are not disclosed.

Thus in conclusion, we can distinguish some motives which are most likely to be economically justified in the long term, which are: the motive of the assets diversification, the motive of the product portfolio diversification, the motive of investments, the motive of getting access to new technologies, the motive of growth potential, the motive of the restructuring, the motive of the market share increase, the motive of increasing the company's value. In each case it is essential to follow the rules of the correspondence between the declared motive and the real one that is formalized in the framework of the current strategy of the company.

As a result of hypothesis verification, we can conclude that the market factor, even with the exception of transactions made in 2008-2009, has no influence on the result of the transaction, in this case we are referring to its profitability.

Thus we offer the following recommendations according to the results of our study:

1. In order to increase the shareholder value in the long term, companies should clarify the motive of the transaction and stick to it. This will help to prepare for the transaction, look for the target of M&A and assess all potential integration risks more thoroughly.
2. In addition to the stated motives there may be the hidden ones that are usually core in mergers and acquisitions. It is important that in the perspective these hidden motives and factors do not destroy the market value by, for example, such means as the annihilation of a competitor.

3. Market factors do not directly affect the transactions efficiency, and, therefore, we can assume that, along with the synthetic company's activity connected to mergers and acquisitions, the obligatory growth driver of the market value should be the internal efficiency of the company, how well it performs on the market, i.e. the ability to grow without mergers and acquisitions.
4. According to the statistics domestic transactions are more effective in the integration processes and achievement of synergies over the cross-border ones. This is primarily explained by the greater competence of the business who merges within the country, particularly with the necessary information at its disposal about the local structure of possible risks arising during or after the transaction. It is sensible to implement even international transactions through a chain of domestic transactions (e.g. 2nd transnational companies announce a merger, so a recommended scenario may include a sequence of mergers with their regional and local offices in each country).

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## Appendix 1

Table A1: Summary analysis of transactions sample

		Target company	Acquirer company	Type of transaction	Cross-border transaction	Change percentage
Motive of assets diversification						
1.	28.09.2012	BP Chemicals Malaysia Sdn Bhd	Reliance Industries Ltd	C	Yes	0%
2.	01.10.2012	Fox Energy Co LLC	Integrus Energy Group Inc	C	No	2%
3.	08.11.2012	Dusa Pharmaceuticals Inc	Sun Pharmaceutical Industries Ltd	V	Yes	-14%
4.	19.12.2012	Martin Professional A/S	Harman International Industries Inc	C	Yes	91%
5.	06.03.2013	Althea Technologies Inc	Ajinomoto Co Inc	C	Yes	18%
6.	19.03.2013	Graphic Packaging International Europe UK Holdings	Essentra PLC	C	Yes	50%
7.	23.05.2013	EKOS Corp	BTG PLC	C	Yes	82%
8.	30.08.2013	Westwood One Inc	Cumulus Media Inc	C	No	-4%
9.	03.10.2013	Mid-Atlantic Convenience Stores LLC	Sunoco Inc	C	No	76%
10.	11.11.2013	Park Holidays UK Ltd	Caledonia Investments PLC/fund	V	Yes	19%
11.	19.11.2013	DelStar Technologies Inc	Schweitzer-Mauduit International Inc	C	Yes	-19%
Motive of the product portfolio diversification						
1.	22.07.2009	FCI Americas Inc	Hubbell Inc	V	No	30%
2.	16.09.2009	Axygen Bioscience Inc	Corning Inc	V	No	8%
3.	28.03.2011	Spectrum Control Inc	API Technologies Corp	V	No	-55%
4.	03.05.2011	Tocris Holdings Ltd	Bio-Techne Corp	V	Yes	-14%
5.	17.01.2012	Convio LLC	Blackbaud Inc	H	No	-18%
6.	21.03.2012	OMGPOP Inc	Zynga Inc	V	No	-76%
7.	27.03.2012	Walker Group Holdings LLC	Wabash National Corp	V	Yes	-6%
8.	27.04.2012	Trelawney Mining and Exploration Inc	IAMGOLD Corp	V	No	-59%
9.	07.08.2012	Comasec SAS	Ansell Ltd	H	No	33%
10.	14.11.2012	Teavana Holdings Inc	Starbucks Corp	V	No	66%
11.	11.04.2013	CyOptics Inc	Avago Technologies Ltd	V	Yes	64%
12.	15.04.2013	Hamlin Inc	Littelfuse Inc	V	No	54%
13.	22.04.2013	International Tubular Services Ltd	Parker Drilling Co	H	No	74%
14.	07.05.2013	PPStream Inc	Baidu Inc	H	Yes	69%
15.	07.08.2013	Cathedral Capital Ltd	Lancashire Holdings Ltd	V	No	-18%
16.	18.08.2013	Arsys Internet SLU	United Internet AG	H	No	85%
17.	12.09.2013	Enterasys Networks Inc	Extreme Networks Inc	H	No	20%
18.	18.09.2013	Purcell Systems Inc	EnerSys	V	No	9%
19.	10.10.2013	MacDermid Inc	Platform Specialty Products Corp	V	Yes	115%
20.	30.10.2013	iWeb Technologies Inc	Internap Corp	V	No	9%
21.	14.11.2013	MapMyFitness Inc	Under Armour Inc	H	No	-17%
22.	03.12.2013	DEK USA Inc	ASM Pacific Technology Ltd	H	No	18%
Investments motive						
1.	06.02.2012	O'Charleys Inc	Fidelity National Financial Inc	H	No	42%
2.	26.10.2012	North American Breweries Inc	Florida Ice & Farm Co SA	H	Yes	65%
3.	21.11.2012	Cipla Medpro South Africa Ltd	Cipla Ltd/India	H	Yes	-1%

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4.	26.11.2012	Thomas Medical Products Inc	Merit Medical Systems Inc	H	No	23%
5.	18.12.2012	Arbitron Inc	Nielsen NV	V	No	46%
6.	01.05.2013	Mid-America Midstream Gas Services LLC	SemGroup Corp	H	Yes	20%
7.	21.05.2013	N-Able Technologies International Inc	SolarWinds Inc	H	Yes	-21%
8.	28.05.2013	PECO Inc	Astronics Corp	H	No	56%
9.	07.06.2013	Energy Micro AS	Silicon Laboratories Inc	H	Yes	7%
10.	12.06.2013	Pioneer Surgical Technology Inc	RTI Surgical Inc	H	No	3%
11.	17.06.2013	San Antonio Internacional Co Inc/Colombia	Estrella International Energy Services Ltd	H	Yes	3875 %
12.	17.06.2013	Vectura Consulting AB	Sweco AB	C	Yes	48%
13.	24.06.2013	Vanguard Health Systems Inc	Tenet Healthcare Corp	H	Yes	9%
14.	26.06.2013	Robinson Point Ltd	Tuan Sing Holdings Ltd	V	No	3%
15.	15.07.2013	Brasil Telecom Cabos Submarinos Ltda	Grupo BTG Pactual	H	Yes	29%
16.	31.07.2013	Devcon Security Holdings Inc	ADT Corp/The	C	No	-13%
17.	12.09.2013	Oclaro Switzerland GmbH	II-VI Inc	H	Yes	-32%
18.	06.11.2013	Gavilon LLC	NGL Energy Partners LP	H	Yes	7%
19.	19.11.2013	Hong Kong Pumped Storage Development Co	CLP Holdings Ltd	C	Yes	7%
Motive of getting access to new technologies						
1.	31.07.2013	Devcon Security Holdings Inc	ADT Corp/The	C	No	-13%
2.	12.09.2013	Oclaro Switzerland GmbH	II-VI Inc	H	Yes	-32%
3.	06.11.2013	Gavilon LLC	NGL Energy Partners LP	H	Yes	7%
4.	19.11.2013	Hong Kong Pumped Storage Development Co	CLP Holdings Ltd	C	Yes	7%
Motive of expenses optimization						
1.	16.09.2009	Hi-Shear Technology Corp	Chemring Group PLC	H	Yes	-6%
2.	09.10.2009	I-Flow Corp	Kimberly-Clark Corp	V	No	12%
3.	12.05.2010	CyrusOne LLC	Cincinnati Bell Inc	C	No	-15%
4.	05.10.2011	QuantaLife Inc	Bio-Rad Laboratories Inc	V	No	20%
5.	28.12.2011	Enobia Pharma Corp	Alexion Pharmaceuticals Inc	V	Yes	30%
6.	27.02.2012	Miller Milling Co LLC	Nisshin Seifun Group Inc	V	Yes	12%
7.	29.02.2012	SeaMicro Inc	Advanced Micro Devices Inc	V	No	-75%
8.	23.03.2012	MediConnect Global Inc	Verisk Analytics Inc	V	No	33%
9.	03.04.2012	RBC Investor Services Ltd	Royal Bank of Canada	H	Yes	5%
Motive of potential growth						
1.	01.10.2008	Auburndale Power Partners LP	Atlantic Power Corp	V	No	-4%
2.	01.10.2008	Micromania SAS	GameStop Corp	H	Yes	-28%
3.	20.07.2009	Canadian Hydro Developers Inc	TransAlta Corp	V	No	7%
4.	24.07.2009	T&T Supermarket Inc	Loblaw Cos Ltd	V	Yes	9%
5.	25.02.2010	Kettle Foods Inc	Diamond Foods Inc	V	No	33%
6.	16.04.2010	PPL Holdings Pte Ltd	Yangzijiang Shipbuilding Holdings Ltd	V	Yes	70%
7.	21.06.2010	Regency Hospital Co LLC	Select Medical Holdings Corp	H	No	24%
8.	22.09.2010	Eliokem International	OMNOVA Solutions Inc	V	Yes	-52%
9.	17.08.2011	Woods Equipment Co	Blount International Inc	V	No	-17%
10.	02.04.2012	DC Payments Pty Ltd	DirectCash Payments Inc	V	No	14%
11.	02.04.2012	Power Integration Switzerland GmbH	Power Integrations Inc	V	Yes	8%

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12.	16.04.2012	Primus Telecom Holdings Pty Ltd	M2 Group Ltd	V	No	61%
13.	09.05.2012	Cost Plus Inc	Bed Bath & Beyond Inc	V	No	2%
14.	09.05.2012	Paloma Partners II LLC	Marathon Oil Corp	V	No	32%
15.	14.05.2012	A&T Petroleum Co Ltd	Genel Energy Plc	H	No	42%
16.	23.07.2012	AirSep Corp	Chart Industries Inc	H	No	63%
17.	02.08.2012	Canadian Fertilizers Ltd	CF Industries Holdings Inc	V	Yes	-1%
18.	04.09.2012	Waseca Energy Inc	Twin Butte Energy Ltd	H	No	-36%
19.	24.09.2012	Orange County Container Group LLC	Smurfit Kappa Group PLC	H	Yes	107%
20.	26.12.2012	Iberoamericana de Energia IBENER SA	Duke Energy Corp	H	Yes	7%
21.	14.05.2013	Enpirion Inc	Altera Corp	V	Yes	-1%
22.	30.07.2013	Clough Ltd	Murray & Roberts Holdings Ltd	V	Yes	-8%
Motive of a supplier purchase						
1.	28.08.2012	CFAO SA	Toyota Tsusho Corp	V	Yes	41%
Motive of producer purchase						
1.	02.08.2013	Premier Nutrition Corp	Post Holdings Inc	V	No	-4%
Motive of new fields development						
1.	09.11.2010	Atlas Energy Inc	Chevron Corp	H	Yes	25%
2.	02.03.2012	First Uranium Pty Ltd South Africa	AngloGold Ashanti Ltd	V	Yes	-41%
3.	07.05.2012	Keystone Midstream Services LLC	MarkWest Energy Partners LP	V	No	9%
4.	02.04.2013	Bazovye Metally CJSC	Highland Gold Mining Ltd	H	Yes	-23%
Motive of deliveries channels expansion						
1.	19.04.2010	Hudson Parent Holdings LLC	Just Energy Group Inc	H	Yes	22%
Motive of restructuring						
1.	18.01.2013	Triumph Engine Control Systems LLC	Triumph Group Inc	V	No	12%
2.	01.03.2013	William Hill Online	William Hill PLC	H	No	4%
3.	31.05.2013	Cummins Rocky Mountain LLC	Cummins Inc	C	No	28%
4.	06.08.2013	IRESS UK Ltd	IRESS Ltd	V	No	5%
5.	24.12.2013	Shenhua Baotou Coal Chemical Co Ltd	China Shenhua Energy Co Ltd	V	Yes	-6%
Motive of market share increase						
1.	16.11.2009	OCE NV	Canon Inc	H	Yes	23%
2.	11.12.2009	Hallin Marine Subsea International PLC	Superior Energy Services Inc	V	Yes	58%
3.	04.03.2010	Delta Ltd	Valmont Industries Inc	V	Yes	22%
4.	17.05.2010	Seacliff Construction Corp	Stuart Olson Inc	V	Yes	9%
5.	28.06.2010	Valspar Paint Holdings Australia Pty Ltd	Valspar Corp/The	H	Yes	15%
6.	29.06.2010	Gemalto M2M GmbH	Gemalto NV	V	Yes	27%
7.	07.07.2010	Mandarin Drilling Corp	Vantage Drilling Co	H	Yes	47%
8.	13.07.2010	ADC Telecommunications Inc	TE Connectivity Ltd	V	Yes	39%
9.	20.09.2010	Blacksmith Brands Holdings Inc	Prestige Brands Holdings Inc	V	No	4%
10.	11.11.2010	CRH Insulation Europe	Kingspan Group PLC	V	Yes	7%
11.	23.11.2010	Matrix Financial Solutions Inc	Broadridge Financial Solutions Inc	V	No	0%
12.	19.05.2011	AES Laboratoire Groupe	BioMerieux	H	No	-15%
13.	02.06.2011	Maverick Group of Cos	Basic Energy Services Inc	V	Yes	-59%
14.	29.06.2011	Stewart Holdings Group Ltd	ALS Ltd	V	Yes	-76%
15.	21.09.2011	Apache Beryl I Ltd	Apache Corp	V	No	-3%
16.	03.10.2011	Empresa Avex SA	BRF SA	H	Yes	8%
17.	18.10.2011	Russian and Ukrainian Beer Businesses	Anadolu Efes Biracilik Ve Malt Sanayii AS	V	Yes	14%
18.	30.03.2012	Eveden Group Ltd	Wacoal Holdings Corp	V	No	-8%
19.	04.04.2012	Viasystems North America Inc	Viasystems Group Inc	V	Yes	-40%
20.	26.04.2012	Torex Retail Holdings Ltd	MICROS Systems Inc	V	Yes	-23%

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21.	17.07.2012	United States Endoscopy Group Inc	STERIS Corp	V	Yes	40%
22.	24.07.2012	Nesk Trading Projects Co	Fawaz Abdulaziz Al Hokair & Co	H	No	14%
23.	27.07.2012	ZIV Aplicaciones y Tecnologias SL	Crompton Greaves Ltd	H	Yes	-25%
24.	06.08.2012	Beilun Hong Kong Investments Ltd	China Merchants Holdings Pacific Ltd	H	No	-5%
25.	07.09.2012	Alliance Films Holdings Inc	Entertainment One Ltd	H	Yes	34%
26.	10.09.2012	Lodestone Holding AG	Infosys Ltd	H	Yes	9%
27.	25.09.2012	Cadillac Jack Inc	Amaya Inc	H	No	76%
28.	27.09.2012	Sealy Corp	Tempur Sealy International Inc	H	No	43%
29.	01.10.2012	Gloopsinc	Nexon Co Ltd	H	Yes	-11%
30.	04.10.2012	JSA International Holdings LP	Mitsubishi UFJ Lease & Finance Co Ltd	H	Yes	66%
31.	08.10.2012	Latexx Partners BHD	Semperit AG Holding	V	Yes	11%
32.	11.10.2012	OMNI Energy Services Corp	Gibson Energy Inc	H	No	2%
33.	23.10.2012	Vermont Hard Cider Co LLC	C&C Group PLC	H	Yes	13%
34.	25.10.2012	Nextmedia Outdoor Inc	Lamar Advertising Co	H	No	19%
35.	31.10.2012	Litle & Co LLC	Vantiv Inc	V	Yes	36%
36.	05.11.2012	Imagination Technologies LLC	Imagination Technologies Group PLC	H	No	-45%
37.	09.11.2012	CoActiv Capital Partners LLC	Element Financial Corp	H	Yes	120%
38.	11.11.2012	Brick Ltd/The	Leon's Furniture Ltd	H	Yes	16%
39.	27.11.2012	Ralcorp Holdings Inc	ConAgra Foods Inc	H	No	11%
40.	02.12.2012	Digital Risk LLC	Mphasis Ltd	H	No	7%
41.	13.12.2012	Glasswool Holdings Ltd	Axiata Group Bhd	V	Yes	0%
42.	17.12.2012	Pallecon	Brambles Ltd	H	Yes	0%
43.	18.12.2012	Fortune Gas Investment Holdings Ltd	China Gas Holdings Ltd	V	Yes	85%
44.	21.12.2012	Robertson's Ready Mix Ltd	Mitsubishi Materials Corp	V	Yes	32%
45.	31.01.2013	Greenstar LLC	Waste Management Inc	V	No	15%
46.	07.02.2013	Bresnan Broadband Holdings LLC	Charter Communications Inc	V	No	71%
47.	19.02.2013	Irish Life Group Ltd	Great-West Lifeco Inc	H	Yes	4%
48.	26.02.2013	Copeinca ASA	China Fishery Group Ltd	H	Yes	0%
49.	11.03.2013	Anabuki Construction Inc	Daikyo Inc	H	No	13%
50.	13.03.2013	Dresden Papier GmbH	PH Glatfelter Co	H	Yes	39%
51.	04.04.2013	Nextel del Peru SA	Empresa Nacional de Telecomunicaciones SA	H	No	-30%
52.	04.04.2013	Heraeus Kulzer Dental Ltd	Mitsui Chemicals Inc	H	Yes	36%
53.	11.04.2013	Fisher Communications Inc	Sinclair Broadcast Group Inc	H	No	14%
54.	15.04.2013	Burn Stewart Distillers Ltd	Distell Group Ltd	H	Yes	7%
55.	01.05.2013	Truth Hardware Corp	Tyman PLC	H	No	24%
56.	14.05.2013	Troms Offshore Supply AS	Tidewater Inc	H	Yes	-10%
57.	10.06.2013	Robert's American Gourmet Foods	B&G Foods Inc	H	No	9%
58.	16.06.2013	Longview Timber LLC	Weyerhaeuser Co	H	No	9%
59.	10.07.2013	CIA de Bebidas Ipiranga	Embotelladora Andina SA	H	Yes	-29%
60.	15.07.2013	3PD Inc	XPO Logistics Inc	V	No	27%
61.	16.07.2013	SHFL Entertainment Inc	Bally Technologies Inc	H	No	-8%
62.	28.07.2013	Western Star Trucks Australia Pty Ltd	Penske Automotive Group Inc	H	Yes	41%
63.	05.08.2013	Colomer Group/The	Revlon Inc	H	No	15%
64.	06.08.2013	Central Refrigerated Transportation LLC	Swift Transportation Co	H	No	17%
65.	07.08.2013	Cardpoint Ltd	Cardtronics Inc	V	Yes	6%
66.	13.08.2013	Portola Packaging Inc	Silgan Holdings Inc	H	No	2%
67.	16.09.2013	Boise Inc	Packaging Corp of America	H	No	10%
68.	05.11.2013	Mindspeed Technologies Inc	M/A-COM Technology Solutions Holdings Inc	V	Yes	33%
69.	02.12.2013	Westport Axle Corp	Universal Truckload Services Inc	H	No	4%
Motive of company value increase						
70.	03.08.2011	Aeroturbine Inc	American International Group Inc	V	No	11%

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71.	14.03.2012	GlobeOp Financial Services SA	SS&C Technologies Holdings Inc	V	No	37%
72.	14.08.2012	Ultrerra Drilling Technologies LP	Esco Corp	C	Yes	-11%
73.	22.08.2012	Sunrise Senior Living LLC	Health Care REIT Inc	H	Yes	5%
74.	05.09.2013	Astex Pharmaceuticals Inc	Otsuka Holdings Co Ltd	H	Yes	14%
75.	16.12.2013	Total Specific Solutions TSS BV	Constellation Software Inc/Canada	H	Yes	45%
<b>Motive of financial situation improvement</b>						
1.	19.11.2012	DTE Gas Resources LLC	Atlas Resource Partners LP	H	No	-17%
2.	23.11.2012	Western Wind Energy Corp	Brookfield Renewable Energy Partners LP/CA	V	No	-2%
3.	24.04.2013	Maharam Fabric Corp	Herman Miller Inc	H	No	24%
4.	07.06.2013	AlphaVille Urbanismo SA	Gafisa SA	H	Yes	-14%
5.	02.07.2013	iWatt Inc	Dialog Semiconductor PLC	V	No	157%
6.	30.07.2013	Pan Am Holdings Inc	ANA Holdings Inc	C	Yes	14%
7.	20.08.2013	Sterci SA	Bottomline Technologies de Inc	C	Yes	-4%
8.	02.10.2013	International Minerals Corp	Hochschild Mining PLC	H	Yes	-19%
<b>Motive of segment positions improvement</b>						
1.	08.06.2009	BPP Holdings Ltd	Apollo Education Group Inc	H	No	-23%
2.	08.12.2010	Aerocan SAS	Ball Corp	V	Yes	-49%
3.	31.01.2012	UP Inc	Benesse Holdings Inc		No	0%
4.	08.02.2012	Aptara Inc	iEnergizer Ltd	V	No	21%
5.	16.02.2012	Mondi Swiecie SA	Mondi PLC	H	Yes	69%
6.	12.03.2012	Zoll Medical Corp	Asahi Kasei Corp	V	Yes	18%
7.	14.03.2012	iGATE Computer Systems Ltd	IGATE Corp	V	No	10%
8.	12.04.2012	Umeco Ltd	Cytec Industries Inc	V	No	19%
9.	14.05.2012	NUKEM Energy GmbH	Cameco Corp	V	Yes	-2%
10.	07.01.2013	Epocrates Inc	athenahealth Inc	V	No	71%
11.	26.02.2013	Baja Broadband LLC	Telephone & Data Systems Inc	V	Yes	-4%
12.	07.03.2013	Asia Container Terminals Holdings Ltd	Hutchison Port Holdings Trust	V	No	-19%
13.	29.07.2013	Saks Inc	Hudson's Bay Co	H	Yes	-6%
<b>Motive of strengthening competitive advantages</b>						
1.	30.07.2012	Alpine Access Inc	Sykes Enterprises Inc	V	No	13%

## Managing the Effect of Shift Work and Emotional Labor on Psychological Well-Being at Work of Geriatric Care Staff

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### **Abstract**

Due to their important contribution to client service and business the objective of this study was to explore the effect of emotional labor and shift work on the psychological well-being at work of geriatric care staff. The sample consisted of 206 geriatric care staff, including care workers and registered nurses. Correlation and multiple regression analyses were conducted and support was found for the relationship between the psychological experience of shift work and psychological well-being at work and between the emotional labor dimension of surface acting and psychological well-being at work. Shift work also obtained significant relationships with the emotional labor facets of surface acting and variety. These results indicate that the psychological well-being at work of care staff is not only influenced by which shift the individual is on (i.e. day or night shift), but more so by the individuals' psychological experience of shift work (PESW). PESW regards the perception of the effect that working shifts has on the employees' daily life. In line with existing research, surface acting was found to be the most salient dimension of emotional labor in affecting employee well-being.

## 1. Background

The increased life expectancy of recent years have resulted in an increase the demand for aged care services which, together with the shrinking labor market of nursing staff poses a challenge for businesses providing long-term care to geriatric patients. These businesses include retirement villages, home-based care, mid- and frail care and facilities specializing in care for dementia and patients affected by other age related disorders.

The growth of the aged population is resulting in an increase in not only the number of healthy years that a person can expect to enjoy, but also in the number of years living in ill health (Murray, 2015). Years lived with disabilities (YLDs) have increased globally by 42% from 1990 to 2013. Included in these figures are an estimated 47.5 million dementia sufferers (including Alzheimer) worldwide. This figure is expected to increase to 75.6 million by 2030. The implication of this is an increased number of years living ill health (up to 10 years according to Murray, 2015) and accordingly, a longer duration of long term care required.

The trend of increased YLDs leads to a steep demand in nursing care for the large numbers of elderly persons. Nursing staff constitute the largest group of employees in the healthcare industry and they play a crucial role in the quality of care provided (Giallonardo, Wong & Iwasiw, 2010). However, nursing staff experience the lowest levels of job engagement and the highest levels of burnout in comparison to other professional healthcare groups (Fasoli, 2010; Nerstad, Richardsen & Martinussen, 2010). The concerning state of these well-being indicators leads to adverse consequences at the individual and organisational level, including poor performance and increased turnover (Salanova, Lorente, Chambel & Martinez, 2011; Xantopoulou, Bakker, Demerouti & Schaufeli, 2009). The nursing profession is also plagued by labour shortages and strained working conditions that are likely to have a negative impact on their health and morale (Garshonet al., 2007; Gregory, Way, LeFort, Barrett & Parfrey, 2007), putting them at greater risk of mental illness compared to the general working population (Shields & Wilkins, 2006), and other healthcare professionals (Voltmer, Wingenfeld, Spahn, Driessen & Schulz, 2013).

The private healthcare industry also stresses the effect of labor shortages on the significant price increases of healthcare services. Nursing staff's salaries constitute approximately 49% of the operating costs of healthcare organizations (Watson, 2015), reflecting the core role of nursing staff in the health care industry. An increased number of individuals over the age of 65 are remaining in employment due to economic reasons related to increased life expectancy and the associated need to ensure a source of support in old age (United Nations, 2013). Despite this continuation of work and social protection systems in some countries the poverty rate of the elderly are usually higher than that of the general population (United Nations, 2013). This is problematic as the majority of elderly people simply cannot afford their expected increase in longevity that is usually compounded by age related disorders and ill health in their final years.

An important facet of service provision to the aged are employees directly involved in the care of the aged including nursing services managers, nurses and care workers. These employees determine the level of service and care provided to the patients and accordingly, they are crucial to the well-being of the clients and the performance of the businesses. It will be beneficial to the clients and ultimately the performance of the business if the nursing care employees are positive and well-adjusted to their work.

Due to the high level of emotional and personal involvement of nursing care employees their psychological well-being has been identified as an important determinant in the commitment to their work/job satisfaction. Literature on health outcomes among nurses, (Khamisa, Peltzer & Oldenburg, 2013) reveal that high levels of work-related stress, burnout and poor health are common within the nursing profession. This may be due to the long working hours and frequent direct, personal and

emotional contact with a large number of patients that characterizes nursing work. Multiple studies show that inappropriate working environments can exacerbate mental health problems (Clayton et al., 2011; Van Stolk, Hofman, Hafner & Janta, 2014). The healthcare industry is no exception, with a very concerning 36.83% of healthcare staff reporting impaired mental well-being (Pelissier et al., 2015). Poor mental health affects patient safety, quality of care and performance (Sexton, Thomas & Helmreich, 2000), and profitability of organizations; in this case, specifically aged care facilities (Cooper & Cartwright, 1994). Therefore, it is of paramount importance to seek a scientific understanding of the psychological processes that underlie the work-related well-being of aged care nursing staff.

In summary, the management of healthcare organizations, particularly those providing geriatric care are faced with numerous challenges including:

- growth in the need for care
- shrinking income of the aged due to longevity and diminishing financial resources,
- relative number of people who can afford the care for extended periods
- shrinking in the numbers of available nursing and care employees.
- work related stress and mental well-being
- management and profitability of organizations involved in geriatric care.

Increasing our understanding of the factors affecting the psychological well-being at work of geriatric care staff could enable organizational management to improve the employees' well-being and reduce turnover. This could contribute to reducing the industry's labor shortages that ultimately influences the price of healthcare services and the performance of healthcare organizations.

## **2. Psychological Well-being of Nursing Care Staff**

Traditionally, research in the fields of work stress and occupational health focused on understanding the way in which negative work events affected employees. Accordingly, research focused primarily on the negative aspects of work, with the goal of reducing negative events and their concomitant psychological and economic costs. In recent years, however, a contrasting line of research has emerged, emphasising positive events and exploring ways to capitalise on the beneficial effects of these events (Ilies, Keeney, & Scott, 2011). The aforementioned line of research, operating under the broad concept of "positive psychology" (Donaldson & Ko, 2010), highlights the experience and amplification of positive experiences in promoting health and well-being (Bono, Glomb, Shen, Kim, & Koch, 2013). Positive psychology aims to understand and foster the factors that enable optimal well-being in people (Seligman & Csikszentmihalyi, 2000).

In line with positive psychology and to ensure a satisfied work force and the retention of employees', psychological well-being at work have been identified as an important consideration for business, management and care providers. According to Dagenais-Desmarais and Savoie (2012) the Psychological Well-Being at Work (PWBW) construct intends to describe an individual's subjective positive experience at work, which comprises of primarily Eudaimonic dimensions. Psychological well-being at work (PWBW), which is well-being contextualized in the work domain, consists of five work-related dimensions. The first dimension, Interpersonal Fit at Work, entails the perception of experiencing positive relationships with the individuals with whom one interacts at work. Second, Thriving at Work, refers to the perception of accomplishing a significant and interesting job that enables feelings of fulfillment. Third, Feelings of Competency at Work, involve the perception of possessing the necessary aptitudes to efficiently perform one's job. Fourth, Perceived Recognition at Work, refers to the perception of being appreciated within the organization for one's work and personhood. The fifth and final dimension is the Desire for Involvement at Work, which is the will to involve oneself in contributing to the organization's functioning and success.

The psychological well-being of employees has consequences at the individual and organizational level, including poor performance and increased turnover (Salanova, Lorente, Chambel, & Martinez, 2011; Xantopoulou, Bakker, Demerouti, & Schaufeli, 2009). Exploring PWBW can provide valuable insights to businesses regarding the management of their employees in order to improve employee well-being at ultimately individual and organizational performance.

### 3. Emotional Labor and Shift Work

Two constructs that have a significant impact on the PWBW of care employees are emotional labor and shift work (Dall'Ora, Ball, Recio-Saucedo & Griffiths, 2016; Leggat, Donohue & Couper, 2013).

The concept of emotional labor is based on the 'act of expressing socially desirable emotions' (Ashforth & Humphrey, 1993). Employees engage in emotional labor when they attempt to regulate their emotional display to align it with the behavior perceived as appropriate for their roles, or the expectations of the organization. In addition to determining the content and range of emotions, these expectations also regard the frequency, intensity and duration with which these emotions should be displayed (Morris & Feldman, 1996, 1997). Emotional dissonance may be experienced upon expressing these required emotions. This occurs as a result of the incompatibility between the employees' actual feelings and those required by their work role or organizational expectations. More specific and in relation to nursing staff (Huynh, Alderson & Thompson, 2008, p. 195) describe emotional labor "as a process whereby nurses adopt a 'work persona' to express their autonomous, surface or deep emotions during patient encounters. The attributes of emotional labor have two dimensions: nurses' autonomous response and their work persona strategies (i.e. surface or deep acts)." According to Bolton (2008) the work personae enable nurses to appear professional by distancing themselves from distressing situations and at the same time enable them to anchor their emotional presence and commitment in their work as care-givers.

Merkel (2002) and Smith and Lorentzon (2005) note that in most instances emotional labor is performed by nurses to align their actual feelings with the caring emotions that they think they should experience. Empirical studies in psychology and management have identified various negative consequences of emotional labor (Hess, 2003). For example, when employees "express superficially-felt emotions" (i.e. surface acting) over an extended period of time, it results in emotional distress that may lead to emotional exhaustion and depersonalization (i.e. burnout). The results of Karimi, Leggat, Donohue, Farrell, and Couper's (2013) research also indicate the significant effects of emotional labor on the well-being of nurses and their perceived job stress. In addition, their findings indicated a positive significant relationship between surface acting and the stress associated with regular interpersonal interaction. This suggested that nurses whom display higher levels of surface acting, also reported experiencing higher levels of interaction stress. Karimi, Leggat, Donohue, Farrell and Couper (2013) proved. More recently, Cheng, Bartram, Karimi, and Leggat (2013) reported that surface acting (in the form of faking unfeeling emotions) has a significant negative influence on the quality of care as perceived by the patients. In addition, Chou, Hecker and Martin (2012) found that surface acting is positively related to emotional exhaustion (a component of Burnout), whilst also being negatively related to job satisfaction.

Shift work involves a non-standard work schedule where the employee's working hours fall outside the traditional 9am to 5pm day. It can involve night shifts, early morning shifts, and rotating shifts. Shift work is common in production and service environments where repetitive tasks are performed, and production and service take place around the clock (Business Dictionary, 2016). As the healthcare industry needs to operate 24 hours a day it is generally dependent on shift workers. Shift work has however been associated with decreased well-being and performance (Barnes-Farrell et al., 2008; Dall'Ora, Ball, Recio-Saucedo & Griffiths, 2016; Cordova, Bradford & Stone, 2016).

Dall'Ora and others (2016) reviewed 35 studies on shift work in a wide variety of industries. Included in their review was 25 studies that were conducted in the health sector. A summary of their findings include that:

- shift work characteristics are associated with compromised employee's performance and well-being;
- negative outcomes can be expected when shifts are 12 hours or longer or more than 40 hours per week;
- working overtime contributed to decreased job performance;
- rotating shifts contributed to worse job performance;
- job satisfaction decreased with fixed night shifts;
- timely breaks contributed positively to employee alertness and prevented fatigue.

If not managed well, the implications of shift work in healthcare can negatively affect both health care staff and their patients. It is crucial to manage shifts well to optimize performance and prevent serious errors. For example, working night shifts have been associated with decreased performance and more errors, than day shifts (Cordova, Bradford & Stone, 2016).

Concurrent to these negative effects generally experienced when working shifts, this study argues that the psychological effect of how working shifts negatively influences the quality of life of employees, should also be investigated. For example, employees may feel that working shifts reduces opportunities for normal social interaction and thereby developing good social support structures. Such employees may have to deal with negative emotions (e.g. guilt) due to the disruption shift works causes to their family life. These experienced psychological effects (i.e. the perception of how shift work influences their well-being) may be an important predictor of actual self-reported psychological well-being, above the actual experience of working shifts.

#### **4. Objective of the Study**

Due to their important contribution to client service and business the objective of this study was to explore the effect of emotional labor and shift work (i.e. the psychological experience of working shifts) on the psychological well-being at work of geriatric care staff. In line with previous research it was expected that the experience of working shifts would explain significant variance in care staff's psychological well-being at work (Dall'Ora, Ball, Recio-Saucedo, & Griffiths, 2016). Further support for the established relationship between emotional labor and psychological well-being at work was also expected (Leggat, Donohue, & Couper, 2013). Particularly, the impact of the surface acting sub-dimension of emotional labor was expected to emerge as the most salient dimension of emotional labor in explaining psychological well-being at work variance (Chou, Hecker & Martin, 2012; Mann & Cowburn, 2005). Moreover, this study aimed to provide further insight into the unique variance accounted for by emotional labor and the psychological experience of working shifts in the psychological well-being of geriatric care staff, whilst controlling for demographic variables that may also influence the experience of these job stressors (e.g. number of dependents, tenure, actual shift during the survey<sup>1</sup>). In accordance with the aforementioned objectives, the ultimate purpose of this

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<sup>1</sup> It was argued that these demographic factors may have effects on the experience of the relevant job stressors (e.g. EL, psychological experience of shift work). For example, one could argue that as the number of dependents of care worker increases, so the stress experienced due to working shifts may increase – due to the logistical implications related to caring for children, or other elderly parents / family members. It could, furthermore, be argued that the actual shift the employee was working on during the administration of the survey, could significantly affect the health (physical and psychological) of the employee. Therefore, the effect of this had to be controlled for in the analysis. Moreover, it was argued that tenure could affect psychological well-being as prolonged exposure to shift work (depending on the design of the shift schedule) may have

study was to derive managerial implications for the management of the psychological well-being of geriatric care staff from the results, with specific reference to experienced emotional labor and exposure to shift work.

## 5. Research Method

### 5.1. Design and data collection

This study made use of a non-experimental research design and a non-probability, convenience sampling method was utilized. The sample of 206 geriatric care staff, particularly care workers (also known as nursing assistants) and registered nurses, were employed by four South African based geriatric care institutions operating under the same executive management company. Upon receiving ethical clearance from Stellenbosch University and institutional permission from the management company, the potential participants were informed of the study. Hard copy questionnaires were distributed to the participants and the completed questionnaires (with informed consent forms) were placed in anonymous boxes which the researchers then collected.

The sample consisted of 98% females and only 2% males. This severely skewed gender distribution was expected as nursing is a female dominated occupation (e.g. Tak, Sweeney, Alterman, Baron & Calvert, 2010). With 90.8% of the sample consisting of African individuals, the sample quite accurately reflected the race distribution of South Africa (Statistics South Africa, 2015). Contrary to current literature emphasizing the aging nursing workforce (e.g. Phillips & Miltner, 2015), only 11.68% of the sample was over 50 years old (mean = 39, SD = 11). The sample consisted of 76.7% care workers, and nurses and sisters made up the remaining 23.3%. In terms of tenure, 51.9% of the sample reported being employed at the organization for 2-5 years, with 31.1% reporting employment of less than one year, and 12.6% reporting more than 5 years of employment (3.5% missing data).

### 5.2. Measurement instruments

The dependent variable, psychological well-being at work, was measured with the Index of Psychological Well-being at work (IPWBW) developed by Dagenais-Desmarais and Savoie (2012). This instrument comprises of various eudaimonic dimensions of well-being and intends to describe individuals' subjective work experience. The five dimensions include interpersonal fit at work (IFW), thriving at work (TW), feelings of competency at work (FCW), perceived recognition at work (PRW), and desire for involvement at work (DIW). The five dimensions together represent a higher order construct of psychological well-being at work (Dagenais-Desmarais & Savoie, 2012). The short version of the IPWBW used in this study consisted of 25 items, all measured on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). According to the original study by Dagenais-Desmarais and Savoie (2012) the IPWBW demonstrates adequate internal consistency ( $\alpha=.964$ ) with similarly high alpha coefficients at the factor level. A recent South African investigation of the IPWBW's psychological properties revealed the following reliability coefficients for the subscales: IFW = .909, TW = .949, FCW = .835, PRW = .918, and DIW = .841 (Boers, 2014).

Emotional labor was measured with the Emotional Labour Scale (ELS), which is a 15-item self-report questionnaire (Brotheridge & Lee, 2003). The ELS measures six facets of workplace emotional display including the frequency, intensity and variety of the emotional display, as well as surface acting and deep acting. The five aforementioned facets are measured using a 5-point Likert scale, whilst the last facet, namely duration of a typical interaction, is measured in terms of minutes. No higher order emotional labor construct underlies this measure. Each facet describes a unique component of EL. Brotheridge and Lee (2003) reported internal consistency estimates for the subscales ranging from .74

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either positive or negative consequences for well-being. The effects of this had, therefore, to controlled for during the analysis.

to .91. A South African study has reported alphas ranging from 0.56 (intensity) to 0.74 (frequency, deep acting) for this scale (Furnell, 2008).

The psychological experience of working shifts was measured with a 7-item scale developed by the researchers in order to determine care staff's perception of how working shifts impacts their daily lives. The instrument utilized a 5-point Likert scale ranging from 'never' to 'always' and including statements such as 'Working shifts negatively impacts my health', 'Life would be easier if I wasn't working shifts' and 'Working shifts disrupts my life'.

### 5.3. Data analysis

The data was analyzed using SPSS 22.0. Item analyses were performed to determine the reliability of the instruments, whilst correlation and multiple regression analyses were conducted to explore the relationships between the emotional labor facets, experience of shift work and psychological well-being at work, as well as its' sub-dimensions.

## 6. Results

The internal reliabilities, means and standard deviations for all three questionnaires are reported in Table 1. The item analysis results for the IPWBW indicated an acceptable reliability coefficient of .90 (Nunnally, 1978). Moreover, all the IPWBW subscales returned acceptable reliability coefficients, with the lowest being DIW with  $\alpha = .66$ .

*Table 1: Descriptive statistics*

	Number of items	M	SD	$\alpha$
PWBW	25	106.35	15.19	.90
IFW	5	20.98	3.43	.70
TW	5	21.59	3.79	.78
FCW	5	22.60	2.92	.70
PRW	5	19.78	4.41	.77
DIW	5	21.40	3.27	.66
Shift work	7	15.76	7.40	.89
EL_Frequency	3	9.81	2.90	.65
EL_Intensity	2	5.78	2.05	.56
EL_Variety	3	8.72	2.77	.64
EL_Surface Acting	3	8.41	2.59	.43
EL_Deep Acting	3	9.25	2.91	.64

*Note:* PWBW = Psychological well-being at work; IFW = Interpersonal fit at work; TW = Thriving at work; FCW = Feelings of competency at work; PRW = Perceived recognition at work; DIW = Desire for involvement at work; EL\_freq = frequency; EL\_inten = intensity; EL\_var = variety; EL\_surf = surface acting; EL\_deep = deep acting

The Shift work scale returned an internal consistency coefficient of .89. The scale was developed to measure one latent construct (i.e. psychological experience of shift work). A Principal Component Analysis (PCA) with Varimax rotation was conducted to validate the factor structure of the instrument. The results revealed that indeed only one factor could be extracted (one Eigen value larger than one), which explained a total of 61.13% variance. Subsequently, a confirmatory factor analysis (CFA) with LISREL 8.8 (Jöreskog & Sörbom, 2002) was conducted to further validate the instrument. The results revealed very good model fit. For example, the RMSEA of 0.08, NNFI of 0.98 and CFI of 0.98 all indicated good model fit (Hair et al., 2006). Furthermore, the sufficiently small SRMR of 0.04, and evidence of close fit [P-Value for Test of Close Fit (RMSEA < 0.05) = 0.06] further underscored the conclusion of a good fitting model (Diamantopoulos & Sigauw, 2000). The completely standardized factor loadings ranged from 0.59 to 0.90 (all significant). Based on all of these results it could be concluded that the shift work scale demonstrated sufficient validity and reliability.

The reliability coefficients derived for the emotional labor facets were somewhat weaker than those reported by the authors (Brotheridge & Lee, 2005), that ranged from .58 (intensity) to .85 (surface acting). The current item analysis returned values ranging from .43 (surface acting) to .65 (frequency). It could be argued that these moderate values may partly be due to the limited number of items included in each of the subscales (the duration subscale consists of one item, the intensity subscale of two items and the remaining subscales of three items each). Nevertheless, the relatively low internal consistency results of the emotional labor subscales are noted as a limitation of this study.

## 7. Relationship between Emotional Labor, Shift Work and Psychological Well-Being at Work

Pearson correlations between the three constructs (and their respective sub-dimensions) were calculated (see table 2). Only four significant correlations emerged. This included the expected correlations between the psychological experience of shift work (PESW) and psychological well-being at work ( $r = -.295$ ,  $p < .01$ ), and between the emotional labor facet of surface acting and psychological well-being at work ( $r = -.155$ ,  $p < .05$ ). The PESW work also obtained significant relationships with the emotional labor facets of surface acting ( $r = .197$ ,  $p < .01$ ) and variety ( $r = .265$ ,  $p < .01$ ).

*Table 2: Psychological well-being at work, PESW and emotional labor correlations*

Measure	EL_freq	EL_inten	EL_var	EL_surf	EL_deep	PWBW	Shift Work
EL_freq	1						
EL_inten	.464**	1					
EL_var	.517**	.546**	1				
EL_surf	.243**	.232**	.439**	1			
EL_deep	.584**	.529**	.525**	.321**	1		
PWBW	-.038	.011	-.102	-.155*	-.039	1	
PESW	.129	.064	.265**	.197**	.063	-.295**	1

Note: EL\_freq = frequency; EL\_inten = intensity; EL\_var = variety; EL\_surf = surface acting; EL\_deep = deep acting; PESW = Psychological Experience of shift work

\*. Correlation is significant at the 0.05 level (2-tailed).

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

Based on the results of the descriptive statistics a series of regression analyses were performed in order to gain clarity regarding the constructs' relationships with each other. The results of the first regression analysis, investigating the effects of the EL sub-dimensions on PWBW revealed the model was insignificant ( $p > 0.5$ ). Therefore, no conclusion regarding statistically significant predictors (i.e. EL dimension) on PWBW could be drawn from the results. The results of the regression analysis of the emotional labor facets on shift work revealed that the model was significant ( $p < .01$ ) and explained 9.5% of variance in the psychological experience of shift work ( $R^2 = 0.095$ ). In this model the only significant predictor of the psychological experience of shift work was variety of emotions ( $\beta = .296$ ;  $p = .002$ ). This seems to indicate that when the care worker needs to display a wider variety of emotions, the negative impact on the psychological experience of shift work is more pronounced. None of the other EL components were significant predictors of the self-reported psychological experience of shift work.

### 7.1. Predictors of psychological well-being at work

Hierarchical regression analysis was conducted in order to determine the effect of the independent variables, emotional labor and psychological experience of shift work on the psychological well-being at work of the geriatric care staff, when possible variance accounted for by demographic variables that may influence the experience of shift work (tenure, number of dependents, actual shift the respondent was working at the time of the study), was being controlled for (table 3). Hence, in step one of the analyses shift, dependents and tenure were entered as predictors. In step two the surface acting component of EL was added to the model (based on the correlation results), and in step three the total score of the measure of the Psychological Experience of Shift Work was entered, in addition to the

other predictors already in the model (model 3). The results revealed that the first model was insignificant ( $p > 0.05$ ). However, the second model, where surface acting was added was significant ( $p < 0.05$ , see table 3). However, the amount of unique variance explained by this model, above that already explained by model 1, was not significant ( $R^2$  change = 0.016,  $p = 0.074$ ). The results revealed, however, that the last model (model three) was significant ( $R^2 = 0.12$ ,  $p = 0.000$ ). Moreover, the results revealed that the unique variance accounted (7%) for by the addition of the psychological experience of shift work (when controlling for EL, and certain demographic characteristics, were significant ( $R^2$  change = 0.070,  $p = 0.000$ ). In this model the only two significant predictors were shift (i.e. day or night shift) with  $\beta = -0.169$ , and psychological experience of shift work with  $\beta = -0.271$ .

Table 3: Hierarchical regression analysis results

Variable	Model 1 Std $\beta$	Model 2 Std $\beta$	Model 3 Std $\beta$	R <sup>2</sup> Accumulative	R <sup>2</sup> Increment
<b>1. Demographic variables</b>				.034	
Dependants	-.101	-.090	-.091		
Tenure	.108	.098	.088		
Shift	-.140	-.137	-.169*		
<b>2. EL Surface acting</b>		-.129	-.077	.050*	.016
<b>3. PESW</b>			-.271**	.12*	.07*

Note. \* $p < .05$ . \*\* $p < .01$ ; PESW = Psychological Experience of Shift Work

## 8. Discussion and Recommendations

Support was found for the relationship between the psychological experience of shift work and psychological well-being at work ( $r = -.295$ ,  $p < .01$ ). This suggests that as employees report a more negative experience of the impact of shift work on their lives (higher scores on PESW), they also experience a more negative effect in terms of self-reported psychological well-being. Moreover, the PESW also obtained significant relationships with the emotional labor facets of surface acting ( $r = .197$ ,  $p < .01$ ) and variety ( $r = .265$ ,  $p < .01$ ). This suggested that these two stressors are positively related. In addition, variety of emotions (as an EL facet) emerged as a significant predictor in the PESW scores. These results suggest that as the variety of emotions the care worker needs to display increases, together with the surface acting display of such emotions, the individual's coping resources probably becomes depleted and the care worker would experience the psychological burden of shift work more severely – impeding their general psychological well-being.

In line with previous research, the results also revealed that the emotional labor facet of surface acting was negatively related to psychological well-being at work ( $r = -.155$ ,  $p < .05$ ). This suggests that engaging in excessive surface acting may impede the long term psychological well-being of care workers. To avoid this negative effect, intervention programmes that increase coping resources that buffer the effect of EL on well-being (e.g. increasing Emotional Intelligence; Karimi, Leggat, Donohue, Farrell, and Couper (2013) could be introduced. The results of the hierarchical regression analysis suggested that, when controlling for the effect of emotional labor and certain demographic variables (including number of dependents, tenure and shift), a significant amount of unique variance (7%) in PWBW could be accounted for by the psychological experience of shift work. In addition to the psychological experience of shift work ( $\beta = -0.271$ ), actual shift (i.e. day or night shift) was the only other significant predictor of PWBW ( $\beta = -0.169$ ).

Taken together these results suggest that working shifts as a care worker (which implies high level of emotional and personal involvement) places a significant psychological burden on the employee, one that needs to be actively managed in order to ensure better long term sustained psychological well-being of employees. Organizations should not only consider the physical effect of shift work on employees and try to alleviate the direct physical effects (e.g. onsite sleeping arrangements), the

psychological effect should also be addressed through appropriate intervention programmes (e.g. awareness of psychological effect and how to address this).

In essence, the results indicate that being on night shift has a significant, albeit small negative effect on PWBW. Well-managed shift work has been shown to improve employees' sense of work-life balance and their well-being (Agosti et al., 2015), which could ultimately affect the quality of care and organizational performance. However, the employees' perception of how shift work affects their lives was a much stronger predictor of their PWBW. In line with the findings of Dall'Ora et al. (2016) it is suggested that organisations could alleviate the adverse psychological effects of shift work through proper management.

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