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IMPORTANCE OF SERVICE QUALITY IN A COMPANY'S REGIONAL DEVELOPMENT – CHALLENGES AND OPPORTUNITIES

STUDENTS' SATISFACTION WITH BUSINESS STUDIES AT PUBLIC FACULTY VS. PRIVATE SCHOOL IN CROATIA

PRICING TACTICS OF GROCERY RETAILERS AS THE DRIVER OF TACTICAL CONSUMER RESPONSE

ELECTROMOBILITY IN THE EUROPEAN UNION AND IN THE SLOVAKIA AND ITS DEVELOPMENT OPPORTUNITIES

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CHALLENGES OF CIRCULAR ECONOMY IN CROATIA



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MATERIALISM AMONG TEENAGERS, THE RELATIONSHIP BETWEEN TERMINAL VALUES AND SOCIAL MEDIA USE

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ABSTRACT

The aim of present study was to investigate the relationship between terminal values, the materialism, and usage of social media among high school teenagers in Budapest, Hungary. Research findings contribute to consumer studies regarding the teenagers terminal value preferences and the relationship between values and materialism. Furthermore the study investigates social media use effect on materialistic attitude. For data collection a paper an pencil questionnaire was applied in June 2017. The sampling was a nonrepresentative, convenience and purposive sampling.

The survey included three major scales. Respondents rated the importance of terminal values provided by the List of Values scale (Kahle et al 1986). The materialism scale conducted was the adaption of Youth Materialism Scale (Goldberg et al 2003) measuring teenagers' attachment to material goods. The social media usage was measured by a Uses and Gratification Scale (Sheldon & Bryant, 2016) reporting the frequency of use for different purposes.

The major findings are the significant correlations between the sense of security and being well-respected values and materialism factors. Using the adopted Uses and Gratification Scale the recent study provides similar component structure than the authors of U&G scale. The influence of social media observation on the strength of materialism was also proved.

KEY WORDS: teenagers, materialism, social media, values, consumerism.

1. INTRODUCTION

Nowadays consumerism is inevitably ruling our societies in the developed countries. Consuming tangible goods and services, gaining experiences play central role in human life and contribute to individuals' well-being, satisfaction and happiness. Consumption is more than mere a way of need satisfaction it is a bundle in the social network we belong to and a special tool for identification. The things possessed and acquired are representing our possibilities, reflecting aims, values and self-concept. Things help to define the self, confirming identity and protect the temporary stability of an unstable and vulnerable construction like self. Consumption and „consuming life” is a perfect freedom-concept providing infinite possibilities and the freedom of choice (Bauman, 2005). Consumers' expectations about their future consumption possibilities determine many other fields of life in the present. Personal relationships, starting a family, career, free time and most of the individuals' decisions are strongly attached to possessions, material uncertainty and consumerism.

Several decades ago, in the modern era work had been terminal value for the members of societies. Supporting the material world through work had a central position

in human life. Since the '80s work has been rather an instrumental value aiming to support consumers' choices and decisions. Bauman (2005) differentiates modern and postmodern societies according to the consumption – work relationship, arguing in modern societies work was a primary concept, everything else was secondary. People had to identify themselves as a loyal employee, worker improving professional skills in a certain field. In contrast postmodernity reinforces people to identify themselves as consumers first, then realizing their imagined status by work. In this context consumerist identification means the mixture of present and future expectations and perceptions related to consumption and material possessions. Thus work has lost its importance and become a less meaningful constraint resulting dissatisfaction at an individual level. Consciously discovering new and better opportunities fosters rapid changes in work relationships and weakens loyalty and engagement.

The recent study aimed to research the young generation's materialism, the value concept and the impact of social media use on materialism. Answering the question „Are teenagers materialist?” helps to understand their motivations and future expectations as consumers and employees as well.

2. THEORETICAL BACKGROUND

Materialism is the attachment to material possessions and acquisitions, an engagement to things and consumer experiences. Perhaps concerns of young generation's materialism are confirmed by the fact they are growing up in a possession centred world seeking more experiences. The human –object relationship is one of the oldest psychological dyads in the history of mankind. Since people satisfy their needs not by producing the things needed but by buying them, infinite choice-sets foster desires and symbols those have become more powerful than before. Although materialism plays a central role in everyday life (Burrough & Rindfleisch; 2011) beside negative effects it provides several positive ones. Materialism positively affects happiness (Wang *et al.* 2017, Chaplin & John, 2010; 2007, Goldberg *et al.* 2003, John, 1999, Ward & Wackman, 1971) personal well-being (Wang *et al.* 2017, Flouri, 2004) satisfaction with life (Wang *et al.* 2017, Pikó, 2006, Richins & Dawson, 1992) and plays an important role in socialization and identity formation (Shrum *et al.* 2013, John, 1999).

Consumer studies influenced by materialism are focusing on the formation of consumer societies (Mukerji, 1983). Human – materials relationship had been more highlighted in the late 19th and early 20th century (Marx, Veblen, Mauss, Durkheim). Later Csíkszentmihályi and Rochberg-Halton distinguished instrumental and terminal materialism (Csíkszentmihályi & Rochberg-Halton, 1978). Belk revealed the nature of materialism through the admonitions of different religions and argued there are differences between inherited and acquired materialism as a personality trait (Belk, 1983). Richins and Dawson's work on materialism as a personal value was a new milestone to the development of materialism theories (Richins & Dawson, 1992). In the last fifteen years materialism was related to happiness, satisfaction with life, self-esteem and other psychological processes and states. Besides there are several findings about the differences between genders (Weaver *et al.*, 2011, Goldberg *et al.*, 2003) family background (Chaplin & John, 2010, Flouri, 2004) and the influence of social comparison (Díaz & Arroyo, 2017, Gil *et al.*, 2016).

Researching materialism is usually based on socialization or psychological paradigm (Usha-Lenka, 2014). During the process of socialization materialism is influenced by gender (Chaplin John, 2007), family communication (Flouri, 2004), social and economic state (Kasser *et al.* 1995), peer communication and acceptance (Chaplin – John, 2010), mass media (Weaver *et al.* 2010), school and relationship with school mates (Abeele – Roe, 2013) and the dependence of reference groups (Gil *et al.* 2016). Culture has a great impact on materialism in particular if possessions are the signs of success and well-being (Gupta, 2011). Culture includes values, norms, habits, convictions and the objects those significant in consumers' behavior (Hofmeister-Tóth, 2014). Among all items, values are capable to transfer culture, because these are common beliefs and ideas determining personal and collective goals

and distinguishing good from bad (Rokeach, 1973). Since consumption processes and decisions belong to a larger social network, the most important values of consumers' culture can be reflected in consumption. Past researches in Hungary found the high importance of consumption related personal values (Hofmeister-Tóth, 2009).

The nature of consumer society is not merely the acts to possess, acquire and satisfy needs but the relationship between the objects and human self. According to Lunt and Livingstone consumers' relationships, interpersonal dependency and identities are revealed through the role of consumer. (Lunt & Livingstone, 1992). Whether to be consumer is a role such as child, parent, friend, employee or any other social role? Roadder John investigated socialization process from the view of consumer studies and she found similarities. Becoming consumer is a personal development process improving identity fragmented by different stages (R. John, 1999). Individuals change their evaluations, observe and imitate others, while identify themselves internalizing values and moral consequences. Observation plays an important role in consumer socialization process and social comparison is one of the ways of social observations comparing individual differences and similarities (Festinger, 1954). Consumption studies are focusing on the materials possessed, social-economic state and consumption related possibilities. Due to the dynamic and rapid technological changes in the last decades social network sites (SNS) provide a great opportunity to observe others without the necessity of personal interactions. SNSs are communities within society in which communities social norms and values are restructured according to the nature of SNS, and the online community creates its own (Hum *et al.* 2011). These microcultures transfer values, norms, and depicting users life through selfies, tweets and a well-designed profile consumer experiences and possibilities might be observed as well. Creating online – mainly SNS – personalities equals to creating and maintaining a new source of information about the user's real personality. In this context SNS can be considered as a field of social comparison. Scrolling SNS timelines user faces the life, enjoyment, happiness and satisfaction of others. This can confirm user's concepts, maintain motivation or frustrate him or her. Negative affects of social comparison via SNS have already been proved (Sheldon & Bryant, 2016).

3. RESEARCH QUESTIONS

Former research findings and the value concept of consumer society raised the question *Are teenagers materialist?* What antecedents can influence their desire to possess and acquire things? Furthermore investigating the relationship between materialism and individual terminal values can result fruitful consequences.

Adolescence is a crucial life stage regarding identity formation which built up by several interstages. According to individuals' age early (12-15) middle (15-17) and later (17-19) adolescence can be distinguished. Our study

is focusing on the middle and later stages because of consumerist reasons. While during the early stage physical and basic psychological changes happen in middle and later stages there is a new individual nascent regarding her or his decisions, opinions and behaviour. These stages are very important for the early adulthood life stage because early adults still representing later adolescent habits, preferences and consumption patterns. Depending on the strength of this attachment to habits the preferences born in adolescence can accompany individuals during lifetime.

Since social media sites are new forms of social interactions but those seem to be everlasting from now, it is important to measure their impact. The question is *Do social media use influence materialism? Is there any difference between active SNS – content formation or simple passive observation?*

4. MEASUREMENT AND SAMPLING

To be able to answer our research question we used three validated scales of past researches. This paper interprets the findings of three different scales. The Youth Materialism Scale (Goldberg *et al.* 2003; YMS) was developed to examine children’s materialism. Owing to its briefness it is still adequate to measure the attitude of older children or teenagers. Respondents rated do they agree a lot (7) or not at all (1) with 10 statements. The List of Values (Kahle *et al.* 1986; LOV) focuses on several values measured by Rokeach as well and can be linked to consumer behaviour. Respondents could rate the importance (7 = very important; 1 = not important) of nine values listed. Exploring the motivation for social media use the social media Uses & Gratifications scale (Sheldon & Bryant, 2016; UG) was applied. Participants could rate how frequently use SNS to gratify their SNS interaction focused motivations (1 = never; 7 = very often).

Sampling was a non-representative convenience sampling applying paper and pencil survey method. Respondents were the students of 4 different high schools (2) and secondary school (2) both located in Budapest. The sampling was conducted in June 2017. Sample analysed include 189 valid answers with the proportion of female 63% and 66% of student had a residence located in Budapest. The mean age was 17, thus the sample is valid for the purposes of recent study.

5. FINDINGS

5.1. List of Values

The means and standard deviations to males and females are represented by Table 1. The List of Values rating provides a reliable internal consistency with Cronbach alpha 0,714 (Nunnally, 1978). *Security* and the *fun and enjoyment* are the most important values for both female and male respondents. The least important values are *being well respected* and the *sense of accomplishment*. As Table 1 is illustrating respondents prefer more individualistic values against social ones. According to the result of further comparisons most of these value preferences are connected to materials and tangible possessions.

Table 1. Descriptive statistics of List of Values

	Mean	Std. dev.	Male	Female
Security	5,45	0,94	5,24	5,57
Fun and enjoyment	5,43	0,94	5,24	5,54
Warm relationship with others	5,40	1,07	5,36	5,43
Self-fulfillment	5,20	1,12	4,93	5,36
Self-respect	5,13	1,18	4,79	5,34
Material success	4,85	1,31	5,03	4,74
Sense of belonging	4,85	1,34	4,71	4,92
Being well respected	4,39	1,45	4,44	4,35
Sense of accomplishment	4,20	1,65	3,60	4,55

Source: Authors

5.2. Materialism

Based on the YMS summary (Table 2.) we can derive the conclusion money plays a central role in respondents’ life and future perspectives. The students are expecting job opportunities guaranteeing higher salary and they would prefer more money to spend in the present too. Materialistic attitude of males and females is not the same regarding the importance of material possessions. Females are looking for the opportunity to acquire things while males place a higher emphasis on possessions and the value of the things possessed. Cronbach alpha indicates good internal consistency again (0,824).

Table 2. Descriptive statistics of Youth Materialism Scale

	Mean	Std. dev.	Male	Female
The only kind of job I want when I grow up is one that gets me a lot of money.	5,52	1,73	5,77	5,37
I would be happier if I had more money to buy more things for myself.	4,22	2,05	4,00	4,34
I really enjoy going shopping.	3,95	2,12	3,19	4,39
I have fun just thinking of all the things I own.	3,94	1,95	3,76	4,05
When you grow up, the more money you have, the happier you are.	3,36	2,00	3,56	3,24
I really like the others that have very special clothes.	3,30	1,97	3,01	3,46
I would love to be able to buy things that cost lots of money.	3,19	2,00	3,53	2,98
I'd rather not share my snacks with others if it means I'll have less for myself.	2,90	2,04	2,97	2,87
I'd rather spend time buying things, than doing almost anything else.	2,77	1,79	2,41	2,98
I like to buy things my friends have.	2,69	1,68	2,80	2,62
Youth Materialism Scale (YMS)	3,58	1,18	3,50	3,63

Source: Authors

For further analysis an exploratory factor analysis was conducted on the YMS ratings. Items resulted the classification of a three component structure. According to the narrative meaning of the statements included by components the first and the second factor were adequate for further examination. First factor was labelled as *acquisition and possession* of goods, while second factor

indicates the *money oriented* attitude of students. Both components have an eigenvalue higher than one and explain the 50% of total variance of the whole sample rating (Table 3). YMS factor structure was the basis of further examinations distinguishing respondents' attachment to material goods.

Table 3. Principal component analysis of YMS

	Factor loadings	Eigenvalue	Variance explained
Acquisition, possession			
I really enjoy going shopping.	,836	3,826	38,259
I'd rather spend time buying things, than doing almost anything else.	,826		
I have fun just thinking of all the things I own.	,574		
I really like the others that have very special clothes.	,538		
I like to buy things my friends have.	,431		
Money orientation			
The only kind of job I want when I grow up is one that gets me a lot of money.	,800	1,166	11,648
When you grow up, the more money you have, the happier you are.	,762		
I would be happier if I had more money to buy more things for myself.	,500		

Source: Authors

Correlations among materialism components and terminal values indicate the motivations behind personal goals (Table 4). Although *being well respected* is one of the least important value it is significantly correlated to both two factors and materialism as well. Hence we can suppose that the sense of being respected is influenced by wealth and financial success according to the respondents. Likewise *security* is in significant relationship with acquiring things desired and money earned. In this sense security can be

considered as the result of welfare and a secure social-economic state. It is not surprising that *material success* strongly and significantly correlates to money orientation and materialism. But the *sense of accomplishment* means rather immaterial, less intangible and more intrinsic success. Since there is no correlation between materialism and the *fun and enjoyment*, the motivations behind enjoyment stayed unrevealed.

Table 4. Correlation of materialism components and the list of values

		YMS	Acquisition, possession	Money orientation
Being well respected	Pearson	,310**	,232**	,267**
	Significance	,000	,001	,000
	Respondents	189	189	189
Security	Pearson	,210**	,192**	,231**
	Significance	,004	,008	,001
	Respondents	189	189	189
Material success	Pearson	,343**	-	,491**
	Significance	,000		,000
	Respondents	189		189
Sense of accomplishment	Pearson	-,183*	-	-,228**
	Significance	,012		,002
	Respondents	189		189
Sense of belonging	Pearson	,170*	,182*	-
	Significance	,019	,012	
	Respondents	189	189	
Warm relationship with others	Pearson	,165*	,160*	-
	Significance	,023	,028	
	Respondents	189	189	
Self-fulfillment	Pearson	-	,182*	-
	Significance		,012	
	Respondents		189	
Self-respect	Pearson	-	,172*	-
	Significance		,018	
	Respondents		189	
Fun and enjoyment	Pearson	-	-	-
	Significance			
	Respondents			

Note* p < 0,05; **p< 0,01 (two tailed)

Source: Authors

5.3. The impact of social media use

Regarding the best-known visible social media sites (SNS) in Hungary – Facebook, Instagram and Pinterest – only 9 of the 189 respondents do not use Facebook regularly. 103 of them are logged in all the day and the majority of respondents check Facebook notifications and timeline at least once a day. 75% of students use Instagram too but only 70 of them are logged in all the day. Pinterest as an emerging visible SNS is used only by the 21% of the respondents.

The main motivations to use SNS are keeping in touch with friends (mean: 6,57), just for fun (mean: 4,89) and following others’ sharings and photos (mean: 4,84). The least frequent motivations of users are promoting

themselves (mean: 1,84) and becoming popular (mean: 2,13). Uses and Gratification scale is adequate to perform principal component analysis. Only two of 19 items were excluded from the analysis because of weak factor loadings. PCA resulted five different components namely *creativity and self-extension, surveillance and knowledge about others, coolness, remembrance and friendship*. The significant correlations among SNS motives and materialism components are represented in Table 5. Because of several significant relationships we can suppose observing others status updates including visual contents shared and using SNS to gain popularity are attached to materialistic attitude. *Remembrance* is not correlated to any of the materialism factors and *friendship* is correlated only to the YMS (0,158; p < 0,05).

Table 5. Uses & Gratifications and materialism factors correlations

	YMS	Acquisition, possession	Money orientation
Creativity and self-extension	229**	-	-
To share my life with other people			
To depict my life through photos			
To create art			
To document the world around me			
To remember something important			
To show off my photography skills			
Surveillance and knowledge about others	,190*	,150*	,217*
To follow my friends			
To see what other people share			
To see my friends visual updates			
To like my followers photos			
Coolness	-	,147*	,284**
To self-promote			
To become popular			
To find people with whom I have common interests			
<i>Note*</i> p < 0,05; <i>**</i> p< 0,01 (two tailed)			

Source: Authors

In order to explain the effect of SNS use a hierarchical multiple regression analysis was conducted. The dependent variables of the regression were the *acquisiton, possession*, the *money orientation* and the *materialism* in general. Regressors and their impact are summarized by Table 6. The three different models are significant at 1% and 5% significance levels. Acquisition, possession and matereialism in general are

influenced by self-extension, surveillance and being cool as SNS use motivations. Money oriented attitude is effected by surveillance and coolness motives. Remembrance and the city of residence (Budapest or not) have no impact on any dependent variables. Friendship influences only materialism in general (B = 0,161; p < 0,05) and gender effects remarkably acquisition, possession (B = 0,555; p < 0,01)

Table 6. Hierarchical multiple regression

Dependents	YMS		Acquisition, possession		Money orientation	
	B	β	B	β	B	β
Creativity and self-extension						
Creativity and self-extension	0,163*	0,138*	0,177*	0,177*	-	-
Surveillance and knowledge about others	0,257**	0,217**	0,188**	0,188**	0,150*	0,150*
Coolness	0,336**	0,284**	0,184**	0,184**	0,147*	0,147*
Model statistics	YMS		Acquisition, possession		Money orientation	
R ²	0,406		0,418		0,211	
F-value	9,096		9,740		4,318	
Significance-level	0,000		0,000		0,015	
Standard error of estimation	1,093		0,918		0,982	
To see what other people share	-		-		-	
<i>Note*</i> p < 0,05; <i>**</i> p< 0,01 (two tailed)						

Source: Authors

6. DISCUSSION

Our study provides several information and explanation related to teenagers' preferences. Teenagers were found to be moderately materialist (YMS mean: 3,58). Their materialism can be connected to their sense of security and being well-respected. Hence we can suppose they place importance on welfare, social – economic state and existential concerns. These findings confirmed the direction of recent materialism researches regarding satisfaction with life, personal well-being, happiness (e.g. Wang et al, 2017).

According to our results social media use is an everyday routine during adolescence. Most of the students are logged in continuously all the day. Thus their everyday activities might be fragmented by notifications and informations available or answering. In accordance with former scientific findings (Sheldon & Bryant, 2016) social network activities can be identified as creativity and self-extension, surveillance and knowledge about others, coolness, remembrance and friendship.

Although multiple regression analysis confirmed the expectations regarding the relationship of observing others on social network sites and materialism, but provided evidences on the impact of SNS content creation on materialism. The "coolness" component as a motive also influences remarkably all the materialist factors. This finding moderates the theory behind our research: not only the social comparison driven passive observation but the active content formation can effect attachments to material goods.

Concluding our results the young adults of the near future are tending to choose a job or professional guaranteeing more money and now the are feeling happiness is determined by the welfare and money available. Teenagers of our sample are currently dissatisfied with their consuming possibilities, hence they are willing to consume more if it is possible or possess more valuable goods. Their materialism is connected to their sense of security and influencing their relationship with others.

7. LIMITATIONS AND FURTHER RESEARCH

The limitations of our study are: the non-representativeness and the homogeneity of the sample. A geographically diversified sample providing information about the attitude of students attending to schools located in the not equally developed regions of Hungary would possibly result in more fruitful consequences. Further limitations are the explanatory variables involved into the models. There are several other antecedents to materialism like current social-economic state, family communication or peer relationships.

We found significant relationships between terminal values preferred by teenagers and their materialism. Since the direction and causality of this relationship could not be proved further qualitative research should be done in order to justify the impact of values on materialism.

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INTERNATIONAL DIVERSIFICATION STRATEGIES AND THEIR ORGANIZATIONAL AND EXOGENOUS ANTECEDENTS

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ABSTRACT

International operations, with its multiplicity of objectives, can be seen as a diversification strategy, sometimes even as a strategic option taken as an effective alternative to product diversification. Focusing on a sample of SMEs of Portuguese manufacturing industries, this study analyzes the international diversification strategies and their organizational and exogenous antecedents. Specifically, entrepreneurial orientation and dynamic capabilities of the firm are two factors of organizational nature, while the environmental uncertainty arising from the diversity of the different markets is studied as an exogenous antecedent. Data collected in 390 companies through an online questionnaire, its processing and analysis through the use of a structural equations model suggest the existence of different types of influence of the antecedents, according to companies' options in various dimensions of the international diversification strategies. These results provide guidelines for managers and generate directions for future research.

KEY WORDS: international diversification, entrepreneurial orientation, dynamic capabilities, environmental uncertainty.

1. INTRODUCTION

Global international transactions have grown since 1990 at average annual rates, generally higher than the world's Gross Domestic Product (World Trade Organization, 2014). In line with the practical importance of the phenomenon, research has addressed different aspects of this theme, focusing the most important currents in the study of the relationships between different types of antecedents and the process of international diversification (eg Preece *et al.* 1999, José Acedo and Florin, 2006), on one hand, and the effects or consequences that, on the other hand, the implementation of such a strategy can have on the competitiveness of the company. Despite the large volume of research in this field, authors such as Hitt *et al.* (2006a) and Lu and Beamish (2006), either it in terms of establishing relationships between some types of antecedents and international diversification, or their influence on competitiveness and performance, given the enormous complexity of all this causal linkage, new factors and approaches should be investigated.

International diversification "may be defined as expansion across the borders of global regions and countries into different geographic locations, or markets"

(Hitt *et al.*, 1997: 767). It's a concept referring to the geographical scope of company's international presence (Goerzen e Beamish, 2003), which reveals the extent of its dependence on external markets (Thomas e Eden, 2004). According to Contractor (2007), the use of "international diversification" instead of "degree of internationalization" should be avoided, unless it is a reference to an explicit purpose of the company's global risk reduction. Nevertheless, researchers more related to the strategic management field have a broader perspective of international diversification strategy than the simple risk reduction through the geographic scope increase (Hitt *et al.*, 1994), considering it a way of improving competitiveness, which is why this research area has dedicated so much attention to the study of the relationship between international diversification and performance. (Hitt *et al.*, 2006a). Being this the prevailing perspective on the subject, international diversification strategies were here investigated along the two following dimensions: intensity and scope (multinational and multiregional).

2. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1. Entrepreneurial orientation

The phenomenon of entrepreneurship has long been an intense object of study for several areas of knowledge, such as economics, sociology, psychology, etc. However, the primary justification for this lies in the widespread belief that the entrepreneurial activity, besides stimulating economic development in general, is also an important factor for the development of the business activity at the level of each individual business unit (Covin and Slevin, 1991). The concepts of entrepreneurship and entrepreneurial orientation, although closely related, refer to diverse realities, interposing themselves in the same way as content and process in the field of business strategy (Lumpkin and Dess, 1996). Thus, while entrepreneurship refers to the content, that is, to the type of “new entry” carried out, the concept of entrepreneurial orientation refers to the process adopted to achieve this entry (Lumpkin and Dess, 1996). Lumpkin and Dess (1996) further clarify that the designation “new entries” refers to actions to launch new entrepreneurial initiatives such as entering a new market through new or existing products (or services). In this study, in agreement with other works of the area (for example, Covin and Slevin, 1991; Lumpkin and Dess, 1996; Wiklund, 1999; Jantunen *et al.*, 2005), entrepreneurial orientation will be centered at the level of the company itself, considering it as the basic unit of analysis. Accordingly to Covin and Slevin (1991), this perspective reveals advantages in relation to the models centered on “traits” or individual characteristics because the effectiveness of an entrepreneur always ends up being evaluated through the performance of the organization in which it is inserted.

2.2. Dynamic capabilities

The capabilities derive from the resources and the way they are integrated and articulated to carry out the activities of the company. Within organizations, therefore, the use of capabilities presupposes the interconnection between resources according to complex patterns of coordination among all the assets involved. It is with the repetition in the use of their capacities and the resulting experience that the company is creating its organizational routines (Nelson and Winter, 1982). These routines constitute for the organizations what competences are in the case of an individual (Ruzzier *et al.*, 2006). Some organizations reveal that they are able to continually develop, update, expand, and reconfigure their organizational capacities, leading to higher ones that can replace them with benefit. In this perspective, the search for the sources of competitive advantage should be seen as an infinite and continuous process (Collis, 1994). It is to this continuous process that Teece *et al.* (1997) designate dynamic capacities. Specifically, dynamic capabilities refer to the process whereby skills and resources can be developed, deployed,

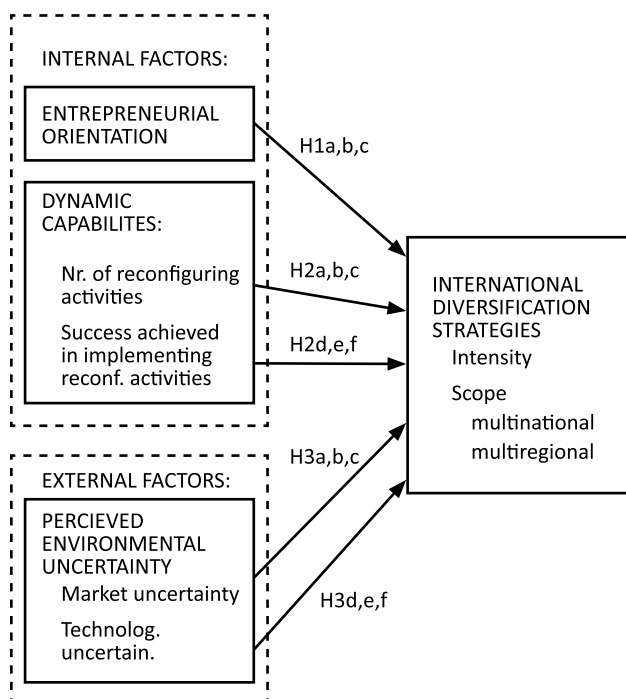
and protected so that they can best cope with rapid changes in their external context (Teece *et al.*, 1997).

By its nature, international activity requires the presence of dynamic capacities that allow the firm a certain compensation of the disadvantages of its condition of foreign entity (that is, of its liabilities of foreignness), having to compete with its local competitors and other origins (Luo, 2000; Luo and Mezias, 2002). That is, success in international diversification processes is closely associated, not only with the resources and capabilities available to the company, but also with its capacity to continually reconfigure and adjust these assets to the contingencies of the internationalization process (Kogut and Chang, 1996).

2.3. Perceived environmental uncertainty

One of the central aspects of the company’s environmental considerations is the inevitability of decision makers to deal with uncertainty in the analysis and interpretation of “signs to be removed” from this configuration of external conditions (Duncan, 1972). It is precisely this necessarily subjective realization of the existence of this uncertainty in the exogenous organizational environment, that authors of various scientific areas related to the management of organizations, have come to call it perceived environmental uncertainty (Duncan, 1972; Gordon e Narayanan, 1984; Waldman *et al.*, 2001; Dimitratos *et al.*, 2004; Matanda and Freeman, 2009). Accordingly to Ganesan (1994), uncertainty derived from the diversity of its external global environment encourages the strengthening of a company’s international diversification of strategies. Figure 1 presents the conceptual model of this study.

Figure 1. Conceptual model



Source: Authors

2.4. Entrepreneurial orientation and international diversification

Oviatt and McDougall (1995) report that internationalization is triggered by the entrepreneurial ability to identify opportunities in other markets. In other words, entrepreneurial orientation is recognized as an enabler of entry into new markets, in particular markets outside the domestic base of an organization, given the "important role it plays in determining the company's behavior when it is internationalized" (Baldegger and Schueffel, 2010). Consequently, the following hypotheses are put forward:

Hypotheses 1a, 1b, 1c: The degree of entrepreneurial orientation has a positive effect on international diversification in terms of (1a) intensity, (1b) multinational scope and (1c) multiregional scope.

2.5. Dynamic capabilities and international diversification

International diversification is a process that usually occurs in a context of great uncertainty, involving high risks and costs that constitute serious obstacles to the implementation of this type of strategy (Hitt *et al.*, 2006a). In particular, in the case of smaller firms, due to their natural scarcity of resources (Buckley, 1989; Kuo and Li, 2003; Cerrato and Piva, 2010). Teece (2007) argues that for analytical purposes, dynamic capabilities can be disaggregated into the ability to detect and shape opportunities and threats, to seize opportunities, and also to maintain competitiveness through reinforcement, combination, protection and, if necessary, reconfiguration of the company's tangible and intangible assets. This way, firms with advanced reconfiguration capabilities (i.e. dynamic capabilities) will be able to identify and seize opportunities not only through new combinations of resources but also through well-organized processes and structures, for their global intervention (Jantunen *et al.*, 2005). In addition to the effect of the firm's own involvement in the company's recombination of assets, it will still be expected that the degree of effectiveness achieved in the implementation of these changes will, in turn, also have an influence (Edmondson *et al.*, 2001; Griffith and Harvey, 2001; Jantunen *et al.*, 2005). Consequently, the following hypotheses are formulated:

Hypotheses 2a, 2b, 2c: The level of involvement in reconfiguration activities has a positive effect on international diversification in terms of (2a) intensity, (2b) multinational scope and (2c) multiregional scope.

Hypotheses 2d, 2e, 2f: The level of success achieved in the implementation of reconfiguration activities has a positive effect on international diversification in terms of (2d) intensity, (2e) multinational scope and (2f) multiregional scope.

2.6. Perceived environmental uncertainty and international diversification

Several research works from various areas such as strategic management, international business, etc. suggest that the perceptions of top managers about the external environmental reality of their firms influence their strategy choices (Miller and Friesen, 1978, Milliken, 1987, Keats and Hitt, 1988, Milliken 1990, Miller 1993). According to Zahra *et al.* (1997), international intervention reduces the risk of fluctuations in the domestic market of the company, contributing, through the diversification of the market for greater stability. Confronted with the dynamism and instability of its environment, that is, the markets in which it operates at any given time, the company can try to reduce the uncertainty arising from these contextual conditions, reinforcing its international presence (Hitt *et al.*, 1994; Zahra *et al.*, 1997).

Following in the footsteps of Miller and Dröge (1986), two aspects of perceived environmental uncertainty will be investigated: market uncertainty and technological uncertainty. Firms in more turbulent market contexts and thus more uncertain, often show greater attention to changes in these markets (Jaworski and Kohli, 1993; Atuahene-Gima and Murray, 2004), and thus in response to those who are more pressured to make timely decisions about their strategy for international operations (Etemad, 2004). A more turbulent technological environment, on the other hand, can create in the companies, opportunities for the development of new products that can be used to expand its customer base (Sheng *et al.*, 2011), challenging them to improving and updating the products of its current range and maintain or strengthen its competitive position (Sheng *et al.*, 2011). Thus, the following hypotheses were established:

Hypotheses 3a, 3b, 3c: Market uncertainty has a positive effect on international diversification in terms of (3a) intensity, (3b) multinational scope and (3c) multiregional scope.

Hypotheses 3d, 3e, 3f: Technological uncertainty has a positive effect on international diversification in terms of (3d) intensity, (3e) multinational scope and (3f) multiregional scope.

3. METHODOLOGY

Sample selection was based exclusively on a database (of Portuguese exporter companies) from the AICEP - Agency for Investment and Foreign Trade of Portugal. As basic profile in terms of firm size, we adopted the SME definition according to the European Union and, so, the minimum number of 10 employees and a maximum turnover EUR 250 million were defined as requirements. Besides, in line with Beleska-Spasova e Glaister (2010), we established, as additional conditions, the involvement in international business at the time, and if this involvement should be, in terms of minimum previous time period, of at least five years, nevertheless, without defining a minimum value for the foreign sales to total sales ratio. The five years minimum period of involvement in international business was considered

sufficient to assess the impact of international diversification in performance (Beleska-Spasova and Glaister, 2010; Beleska-Spasova *et al.*, 2012). After adjusting the original database to the requirements, a list of 2895 companies were then compiled, and, so, the sampling frame used in the study was established. As final result of the data collection process, we obtained 390 valid questionnaires, corresponding to an effective rate higher than 16%, which can be considered as satisfactory, since the average percentage level of response in case of questionnaires sent to top managers is typically between 15 and 20% (Menon *et al.*, 1996).

4. RESULTS

To assess the goodness of fit of the measurement model, absolute measures as the chi-square statistical significance (χ^2) and the RMSEA (Root Mean Square Error of approximation) were used. The overall chi-square was found significant ($\chi^2 = 385.46$; d.f.= 183; $p < 0.000$) and the RMSEA = 0.039, which is an indicative factor of a good fit. Additionally, three incremental measures of fit were assessed: Comparative Fit Index (CFI=0.99), Incremental Fit Index (IFI=0.98) e Tucker-Lewis Fit Index (TLI=0.98).

Table 1. Structural model results

Hypotheses	β	T	Supp./Not supp.
H1a: Entrepr. Orientation → International Diversification (Intensity)	0,09	1,46	Not supported
H1b: Entrepr. Orientation → Internat. Divers. (multinational scope)	0,38	7,25***	Supported
H1c: Entrepr. Orientation → Internat. Divers. (multiregional scope)	0,34	4,79***	Supported
H2a: Dynam. Capab. (nr. of reconfig.activ.) → Int. Divers. (Intensity)	-0,05	-1,22	Not supported
H2b: Dynam. Capab. (nr. of reconfig.activ.) → Int. Divers. (multinat. scope)	0,04	1,26	Not supported
H2c: Dynam. Capab. (nr. of reconfig.activ.) → Int. Divers. (multireg. scope)	0,02	0,41	Not supported
H2d: Dyn. Capab (success in impl. reconf. activ.) → Int. Divers. (Intensity)	0,02	0,62	Not supported
H2e: Dyn. Cap. (success in impl. reconf. activ.) → Int. Divers. (multinat. scope)	0,15	4,75***	Supported
H2f: Dyn. Cap. (success in impl. reconf. activ.) → Int. Divers. (multireg. scope)	0,13	2,84**	Supported
H3a: Perc. Environ. Uncert. (tech.) → International Diversification (Intensity)	0,51	7,57***	Supported
H3b: Perc. Environ. Uncert. (tech.) → Int. Divers. (multinational scope)	0,07	1,37	Not supported
H3c: Perc. Environ. Uncert. (tech.) → Int. Divers. (multiregional scope)	0,02	0,26	Not supported
H3d: Perc. Environ. Uncert. (mark.) → International Diversification (Intensity)	0,18	2,74**	Supported
H3e: Perc. Environ. Uncert. (mark.) → Int. Divers. (multinational scope)	0,22	4,14***	Supported
H3f: Perc. Environ. Uncert. (tech.) → Int. Divers. (multiregional scope)	0,16	2,14*	Supported
<i>*p<0.05; **p<0.01; ***p<0.001. Two-tailed test</i>			

Source: Authors

The conceptual model was tested using structural equation model. Results of this test suggest an acceptable fit of the model to the data: $\chi^2 = 461.68$; d.f.=192; $p < 0.000$; RMSEA = 0.046; CFI = 0.98; IFI = 0.96; TLI = 0.96. Table 1 depicts the estimates of the parameters and the T-values obtained for the tested hypotheses.

Table 2. Effect of the control variables

Control Variables	β	T
International Experience → International Diversification (Intensity)	0,10	2,41*
International Experience → Internat. Divers. (multinational scope)	0,05	1,42
International Experience → Internat. Divers. (multiregional scope)	-0,17	-3,48***
International Business Assistance → Int. Divers. (Intensity)	-0,13	-2,61**
International Business Assistance → Int. Divers. (multinat. scope)	0,28	6,71***
International Business Assistance → Int. Divers. (multireg. scope)	0,13	2,40*
<i>*p<0.05; **p<0.01; ***p<0.001. Two-tailed test</i>		

Source: Authors

The effect of the control variables used are presented in Table 2.

5. DISCUSSIONS AND IMPLICATIONS

The results of this work reveal that the entrepreneurial orientation has different effects on the two dimensions of the international diversification construct investigated: intensity and scope. Although positive in both cases, the result of the stock assessment on the intensity of international diversification, in a somewhat surprising way, does not present significant values to support the hypothesis that there is an important role for that type of guidance. The explanation may be that the firms with the highest degree of international diversification are the ones that are most “installed” in terms of internationalization strategy. “Installed” in the sense that they have defined the guidelines for their overseas business for a longer period of time, and that they have therefore come to realize these types of options, already with more consolidated structures and processes. This “accommodation” could mean a less markedly entrepreneurial presence vis-à-vis those other companies that are more diverse in scope. Regarding the scope of international diversification, whether in the multinationality guideline (measured by the number of countries in which the companies operate) or in terms of the distribution of international business across the globe, degree of entrepreneurial orientation has revealed a very significant association with more diversified companies internationally. This suggests, therefore, the existence of an important role of this position as an enabler of international diversification in the “scope”, since companies in this situation have been “exposed” to a greater number of contexts (national and regional). In other words, they were more willing to adjust their practices and assume a greater diversity of risks, thus revealing more active entrepreneurial behavior (Lumpkin and Dess, 1996).

This work investigated the influence of dynamic capacities on the choices made by companies with regard to their strategies of international diversification, since any change in intensity or scope of that strategy is likely to be influenced to a greater or lesser degree by the type of use in resource constraints and organizational routines (Villar *et al.*, 2014). Therefore, although in many cases companies may be involved in reconfigurations of their resources and capabilities, with a view to strengthening their international diversification strategies, this effort may not be sufficient. In fact, as the results suggest, this commitment may not lead to success in this design, if the necessary skills and competences are not simultaneously present to effectively carry out these reconfigurations (Jantunen *et al.*, 2005). That is to say, also in this case, being active is obviously not the same as being effective. The lack of a significant effect of the success achieved with the reconfigurations carried out on the intensity of international diversification, as in the case of entrepreneurial orientation, may be due to the characteristics of the sample used.

Specifically, there was a significant and positive effect of market uncertainty on all the dimensions of international diversification studied: intensity, multinational scope and multiregional scope. The results suggest, therefore, that

companies subject to a greater degree of market uncertainty, being more attentive to their external environment, tend to implement international diversification strategies both more intense and broader, in the latter case in references the two perspectives investigated, number of countries and distribution of international operations by regions of the globe. Regarding technological uncertainty, there was a positive and significant influence only in the case of the intensity of the international diversification, hypothesis H3a, thus not confirming the hypotheses H3b and H3c that suggested the existence of a positive effect of this type of uncertainty on the two strands (number of countries and distribution by regions) from the scope of international diversification.

Adapting to these conditions of technological turbulence, and therefore developing the necessary skills and competences, companies can, when necessary, re-evaluate their product ranges and the markets for which they are intended. The eventual success in this continuous “confrontation” with its external technological context in the markets of the countries in which it already has international operations can, therefore, in a context of global economic turbulence, lead to decisions to strengthen the presence in these markets in terms of investment.

Therefore, particularly when the international diversification adopted privileges the scope dimension, managers of SMEs should pay special attention to the need to develop (or reinforce) an orientation of an entrepreneurial nature at the level of the organization. In addition, as a third recommendation, SME managers should, take into account the specific characteristics of the international operations in which they are involved, in order to identify carefully which activities are most critical to the continuation of these operations. Managers responsible for SMEs, making use of their dynamic capabilities, should also provide the effective reconfiguration of assets of those associated activities, a process for which, as previously seen, entrepreneurship will also be an important requirement. This way, we will try to avoid involvement in spurious reconfiguration processes, since, as we have also concluded, only the effectiveness of this involvement can influence international diversification strategies. The previous recommendations should also be complemented by the need for managers to strive for regular monitoring of the external environmental realities of their companies so that, in the context of their international business, they can accommodate the changes that this reality requires.

6. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Two main limitations of the study should be noted. First, its cross-sectional nature, since for many of the studied variables, involving processes over the time, the use of longitudinal data, therefore (related to a time-series), would allow a more appropriate assessment of relationships between the main variables. Secondly, with

regard to the central theme itself, the strategies for the international diversification of SMEs, despite the various dimensions used (one referring to intensity and two to scope), the non-investigation of the cultural dimension is potentially a limitation (Sullivan, Zahra *et al.*, 2000, Evans and Mavondo, 2002, Shirokova and McDougall-Covin, 2012).

Concurrently, two suggestions for future studies are presented. First, a longitudinal study, also focusing on SMEs, once the scarcity of research work of this type on the current theme is a major problem. Secondly, because of the additional contribution it could make to the study in terms of understanding the international activities of SMEs, the cultural dimension should also be the subject of research in future works.

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VITIVINICULTURE, ENVIRONMENT AND BIODIVERSITY: SUSTAINABILITY ACTIONS

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ABSTRACT

The rational use of resources is currently a widely discussed topic in any organization, although it takes on greater importance in those of productive scope. Measures of different levels – strategic, tactical or operational – are increasingly being implemented, so it is pertinent to analyze their effect on the distinct dimensions of sustainability: environmental, economic and social. Any strategic process must go through those that are considered the four crucial stages: analysis, formulation, implementation and control. The perfect knowledge of the environment and its emerging needs and concerns along with an in-depth survey of the internal situation of the organizations will allow us to achieve truly differentiating levels of excellence. This research, carried out in a wine-producing organization – *Adega Cooperativa de Mangualde* – identifies its crucial activities, the main strategic, tactical and operational actions that have been implemented in the last eight years, fits them into the above-mentioned dimensions of sustainability and determines its relative weights. Particular emphasis is placed on grapes suppliers – the capital holders –, as regards their mode of production and its impact on biodiversity and the environment. Raising public awareness of this issue is of great importance and people should be encouraged to alter their behaviour by changing some attitudes in everyday life. This awareness to achieve sustainable development becomes even more important insofar as it is a cooperative institution with a management model of well-defined specific characteristics.

KEY WORDS: strategy, sustainable vitiviniculture, environment, biodiversity.

1. INTRODUCTION

The production and rational use of resources form the basis of many of the environmental problems we face, including climate change. Thus, its correct and efficient use calls for economies that lead to benefits ranging from a global (national or world) scale to a partial one (at the consumer level), with consequent cost reduction and increased competitiveness.

The idea of sustainability is based on the economic activity, the environment and the global well-being of society. It enables a type of development capable of responding to the present needs without compromising the growth capacity of the future and future generations and it aims to improve the individuals living conditions, while preserving the environment in the short, medium and, especially, long term. Sustainable development is based on a triple objective (economically efficient, ecologically sustainable and socially equitable) that can only be achieved if these three dimensions evolve harmoniously, irrespective of the business area. (Initiative, Global Reporting, 2012)

In May 2001, the European Union adopted a strategy for sustainable development, revised in 2005, with the aim of giving it new dynamism. The World Partnership for Sustainable Development, adopted by the Commission in 2002, has given it an important external dimension. Integrating environmental issues into the definition and implementation of other policies is an essential element in achieving the goals.

In order to promote sustainability, public authorities and organizations should take appropriate measures to limit the harmful effects of transport and health risks, to improve the management of natural resources, including their consumption, to combat social exclusion and climate change, and limit its consequences. (Almeida, 2005)

Of the set of actions to implement, energy concern plays a major role due to the direct and indirect impact on the environment, although it is sometimes relegated to the background. The weight of the energy bill in the operating costs of a company in the industrial sector is usually low when compared to other factors of production, such as labor and raw material. Energy management is therefore

often neglected, which generates significant waste and contributes to the reduction of the competitiveness of companies. (Gaspar, 2013)

The concept of Rational Use of Energy, which emerged following the so-called oil shocks, has decisively altered the way of facing energy, demonstrating that it is possible to grow without increasing consumption or affecting the quality of production. While the competitiveness argument naturally remains the most responsive to managers, increasing environmental pressure has reinforced the need for efficient energy use. It is unanimously accepted that, eventually, market policy instruments, such as environmental taxes, will introduce the polluter pays principle, which will make the least-prepared companies heavily penalized. (Gaspar, 2013)

The objective of the present work is to frame and understand the effects of several actions implemented for eight years in a winemaking organization: the Adegas Cooperativa de Mangualde. It begins with a brief "Literature Review", which addresses the issue of sustainability and energy and describes the target organization of the study. The "Methodology" topic includes an explanation of how information has been collected and treated and an exhaustive identification of the developed actions. Finally, in "Results", we present the relative weights of the actions for the different dimensions and the comparative metrics.

2. LITERATURE REVIEW

2.1. Environmental, economic and social sustainability

The concept of sustainability emerged at the end of the 20th century, stating that economic development must also take into account the ecological balance and the preservation of the quality of life of human populations at the global level. The idea of sustainable development is based on the principle that man must spend natural resources according to their capacity of renewal in order to avoid their exhaustion (Figure 1). Thus, sustainable development is understood as meeting the needs of the present without compromising the possibility of future generations to do the same. (Almeida, 2005)

Sustainability is based on the following principles or rules of resource management:

- the exploitation of renewable resources must not exceed regeneration rates;
- emissions of pollutant waste must be kept to a minimum, not exceeding the absorption capacity and regeneration of the ecosystems;
- non-renewable resources must be exploited in an almost sustainable way, limiting their rate of depletion to the pace of the creation of renewable substitutes;
- wherever possible, waste from the use of non-renewable

resources should be reused and recycled. Waste from some economic activities can serve as raw materials for other.

Figure 1. Use of natural resources



Source: A. T. Almeida, "Manual de boas práticas de eficiência energética", 2005

The environmental concern should not only affect the production process, but should also extend to the vineyards, through a viticulture in contact and focused on the preservation of natural resources, respecting the practices of protection and integrated production. Viticulture constantly strives for a balance between the use of technology and concern for the environment, such as drip irrigation (making it possible to consume less water), non-mobilization of soils (keeping a vegetation cover that retains moisture, benefiting plant and animal life and biodiversity, and a lower water requirement) and fertilization with by-products (the grafting of the grapes and the organic matter of pruning). (Félix & Cavaco, 2009)

Economic activity, the environment and the overall well-being of society form the basis of sustainable development. This can only be achieved if the three axes evolve harmoniously. Thus, the concept of sustainable development can be represented by Figure 2, in which the three circles represent the associated environmental, economic and social dimensions, and the following aspects must be emphasized:

- economic, social and environmental processes are strongly interlinked;
- sustainable development goes beyond environmental preservation;
- the activities carried out in the present medium-term should guarantee the global satisfaction of the needs of future generations;
- sustainable development calls for long-term structural changes in the economy and the social system so that a reduction of the consumption of natural resources is possible while maintaining economic potential and social cohesion. (Almeida, 2005)

Figure 2. Environmental, economic and social dimensions of sustainable development



Source: A. T. Almeida, “Manual de boas práticas de eficiência energética”, 2005

2.2. Sustainable energy

The World Energy Council (WEC)¹ has been at the forefront of the energy debate for almost a century, influencing thought and stimulating global action to ensure sustainable and accessible energy for all. It contributes to global, national and regional energy strategies through the organization of high-level events, the publication of benchmarking studies and the work of its extensive network of members, facilitating the dialogue leading to the definition of energy policies. Independent and inclusive, WEC’s work covers all nations and all sectors of energy - from fossil fuels to renewable resources (Council, World Energy, 2014).

2.2.1. World fuel production and consumption

In the last 15 years, there has not been a large percentage change in the different types of fuel sold for primary energy, although there has been a slight decrease in the oil level (Figure 3).

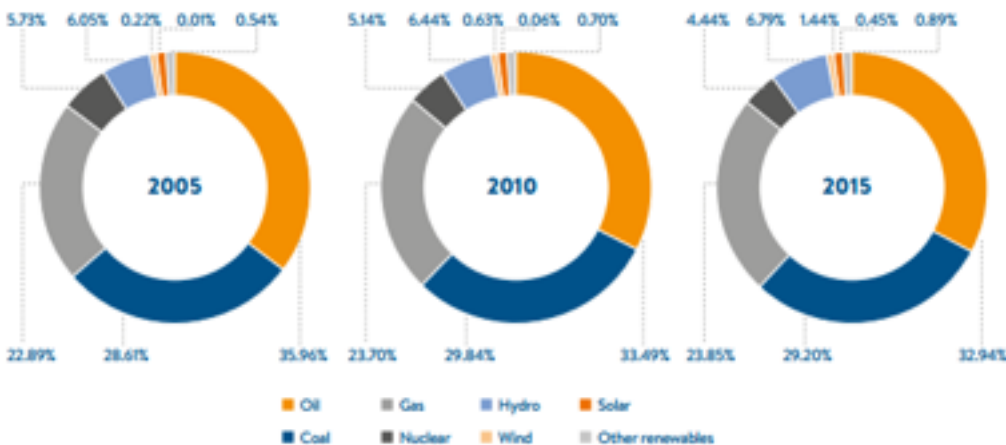
The growth of world oil production in 2015 significantly outpaced the growth in consumption of this fuel for the second consecutive year (Figure 4). Production increased by 2.8 million barrels per day (b/d), led by increases in the Middle East (+1.5 million b/d) and North America (+0.9 million b/d). World oil consumption increased by 1.9 million b / d, almost twice the 10-year average, with above-average growth driven by OECD countries. The Asia-Pacific region accounted for 74% of global growth, with China contributing to the largest national growth in world oil consumption (+770,000 b/d). (Dudley, 2016)

2.2.2. Rational use of energy

Rational Use of Energy (RUE) aims to provide the same level of production of goods, services and comfort through technologies that reduce consumption compared to conventional solutions. The RUE may lead to substantial reductions in energy consumption and emissions of pollutants associated with their conversion. In many situations, it can also lead to high savings in the life cycle costs of energy-using equipment (initial cost plus lifetime cost of operation). Although generally more cost-effective in terms of up-front cost, more efficient equipment consumes less energy. This leads to lower operating costs and presents other additional advantages. (Almeida, 2005)

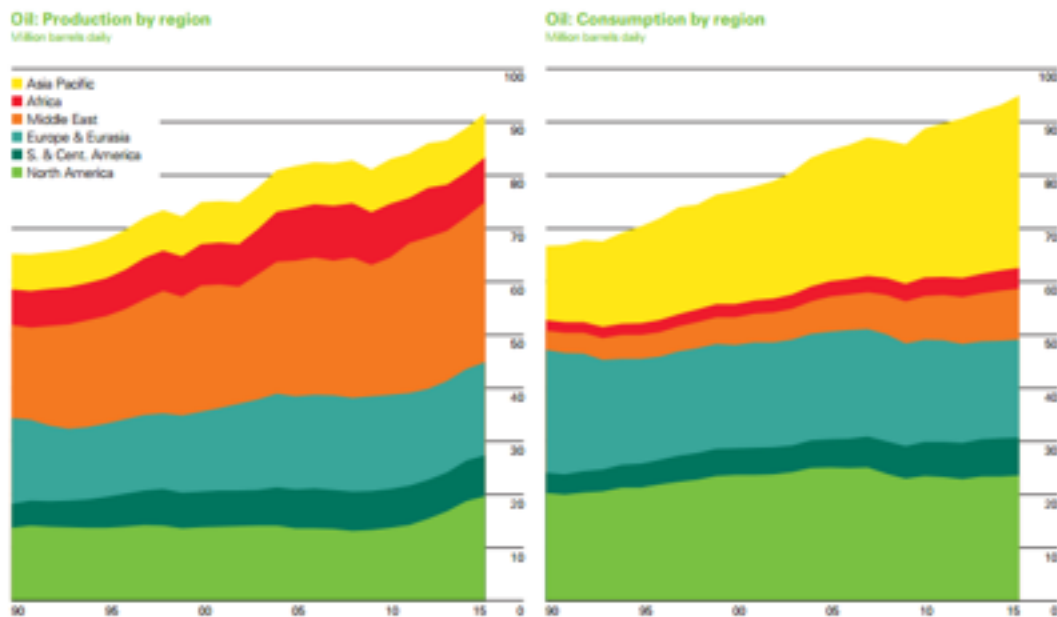
One of the most significant impacts of primary energy use through the RUE, in addition to reducing costs associated with energy bills, is to contribute to the mitigation of emissions of pollutants associated with energy conversion. Energy efficiency technologies often offer other non-energy benefits that are not offered by supply side alternatives. From the perspective of many consumers, it is the non-energy benefits that are largely at the origin of the decision to use technologies that are more efficient. Some examples of non-energy benefits are increased comfort, safety, work productivity and employment, noise reduction, improved process control, water saving and waste reduction.

Figure 3. Five-year evolution of the percentage of different types of fuel sold for primary energy



Source: World Energy Council /Oliver Wyman, 2016

¹ Institution of the energy area accredited by the United Nations (UN), representing more than 3,000 organizations - public and private - from almost 100 countries.

Figure 4. Oil production vs world consumption

Source: World Energy Council /Oliver Wyman, 2016

2.3. Sustainability indicators

Indicators allow the acquisition of information on the environmental, economic and social performance of a particular organization and the one associated with a specific product, providing a more complete assessment of sustainability. The Global Reporting Initiative (GRI)² has pioneered and developed an understandable and accessible Sustainability Reporting Framework, currently in use throughout the world. This guide enables companies and organizations to be able to measure and report on their environmental, social and economic performance, these being the three pillars of sustainability.

The set of indicators suggested by the GRI are structured to reflect the inputs, outputs and types of impact that an organization has on the environment. Energy, water, and materials represent the three main types of standard inputs used by most organizations. These inputs result in outputs of environmental relevance, which are represented in the form of emissions, effluents and waste. Both the Transport and the Products and Services also represent areas in which an organization can cause environmental impacts, often indirectly through third parties, such as customers or suppliers of logistics services (Initiative, Global Reporting, 2012).

Energy indicators comprise the most important areas of energy use by the organization, which include direct and indirect energy. The direct use of energy consists of the energy consumed by the organization and its products and services. Indirect energy consumption, on the other hand, is the energy that is used by third parties that serve the organization. The outputs correspond to sets of indicators

that include different types of pollutants, representing emissions to the air, effluents and solid wastes.

Some indicators used to assess sustainability in the wine industry are identified below.

- Percentage of materials used that are recycled as input materials.
- Energy used.
- Energy purchased and consumed through renewable energy sources.
- Energy saved due to conservation or increased efficiency.
- Initiatives to promote energy efficiency or energy renewal based on products, services, and reductions in energy requirements because of these initiatives.
- Initiatives to reduce indirect energy consumption and improvements achieved.
- Amount of water used.
- Water resources significantly affected by water consumption.
- Water treatment and reuse.
- Proximity of lands occupied/used in protected or high biodiversity areas.
- Description of significant impacts of activities, products and services in protected areas and areas of high biodiversity outside protected areas.
- Total Greenhouse Gases (GHG) emitted.
- Initiatives to reduce GHG emissions and achieved improvements.
- Quantity of water discharge by quality and destination.
- Amount of waste by type and method of disposal.

² Non-profit organization, founded in Boston in 1997, which brings together efforts to promote a sustainable global economy by providing guidelines and indicators for sustainability reporting.

- Initiatives to mitigate environmental impacts of products and services.
- Percentage of materials sold (bottles or packaging) that are collected.
- Fines/sanctions for non-compliance with environmental laws or regulations.
- Investments and expenses in environmental protection/care. (Santos, 2012)

2.4. Adega Cooperativa de Mangualde

2.4.1 Historical contextualization

Integrated in the Dão Demarcated Region³, the Adega Cooperativa de Mangualde (ACM) was founded on December 4, 1963, a decade marked by the valorization, expansion and implementation of the spirit and cooperative values in Portugal. It received the first 629 tonnes of grapes produced by its members on 18 October 1971. (Mangualde, Adega Cooperativa, 1963)

In the 70's, the winery, with its own headquarters, was producing, for the first time, approximately half a million kilos of grapes from its cooperators. In the 90's, a process of investment and modernization began, both at the level of facilities, and at the level of laboratory equipment and quality control of wines. The Winery used state and community funds, in order to build a winemaking and stabilization center for wines and invested in a bottling line of its own. At the human resources level, there was a focus on the training and hiring of qualified personnel in the oenology and management areas, and partnerships were developed with local entities and institutions.

The Adega Cooperativa de Mangualde has as its mission the production and bottling of common and liqueur wines, from the grapes coming from the vineyards of its associates, and its distribution through the various channels in the national and international markets. It promotes, in parallel, all the wine culture and traditions through the Interpretative Center of Vine and Wine (ICVW)⁴. Its vision is to achieve standards of efficiency and improvement of wine-growing, encouraging and assisting wine-grower associates, providing expert support, field monitoring of their vineyards and promoting training actions appropriate to the needs and evolution of the sector; to produce wines according to demand and market requirements; to distribute the wines nationally and internationally; to contribute to the sustainable development of the environment; to develop wine tourism at the local, regional and national levels. (Mangualde, Adega Cooperativa, 2016)

2.4.2 Production process

The ACM production process is divided into the reception, vinification, stage, blending, and preparation for bottling /

filling, bottling / filling and storage sections. (Mangualde, Adega Cooperativa, 2015)

Receiving

It is at this stage that the winery receives the grapes from its members. In the reception process, the grapes are weighed, separated by grape varieties and the first laboratory tests are carried out to identify the associated alcoholic content, so that the amount to be paid to each member is determined. The grapes are then inspected for their phytosanitary status and subsequently discharged into the receptacles. It is here that the first oenologicals that will act throughout the process of transformation until the obtaining of the wine masses that follow to the process of vinification are added.

At the time of the phytosanitary analysis, some grapes may not meet the minimum requirements, and the partners are given the option to bring the grapes back or to be sent to stall. In this case, a token payment is made to help transport expenses.

Winemaking

Following the production process, there is the vinification. At this stage, the wine masses are received from the reception and a set of operations is performed whose purpose is to convert the juice from the crushing of the grapes into wine. As in the previous process, winemaking is processed by vine varieties. For each type of wine, the oenological and other constituents necessary for its finishing, such as, for example, liqueur wines, are added. At the end of the winemaking process, the resulting bulk wine follows distinct paths: one part is for sale in bulk and the remainder goes to stage.

Stages

At this stage, the wine in bulk rests in stainless or cement deposits and wood chips are added, so that the wine absorbs the characteristic flavor of the American oak. The length of this proceeding depends on the need and specificity of each type of wine. Thus, from the moment the wine presents the desired conditions, it goes to a new process.

Allotment

Allotment does not represent a productive process per se, but the moment when the winemaker decides which lots to create for the respective year. Thus, at this stage, two or more wines from different deposits are joined, in order to obtain a batch with the desired physical-chemical and organoleptic characteristics.

Preparation for bottling/filling

The next step will be to prepare the wine to be bottled. It is at this moment that the oenological joints are made, in order to guarantee the physical-chemical and microbiological stabilization of the lots to be bottled and/or packaged in bag-in-box.

³ Located in the center of the country, the Dão Demarcated Region was the second to be created in Portugal in 1908. In 2017, it occupies 14,647 hectares of vineyard, having recorded/presented an average production of 339,000 hectoliters in the last 14 years.)

⁴ The construction of the ICVW, in 2013, made it possible to rehabilitate the old cellar. It allows enotourists, through the visit and a multimedia presentation, to feel and perceive the whole process of the cycle of the vine and wine, as well as the flavors, with a wine tasting at the end.

Bottling/filling

The last process concerns bottling/filling. At this stage, the parcels of each lot, which are intended to satisfy an order or constitute stocks, are fed into the bottling and filling lines. Corks, labels, CVR⁵ and IVV⁶ certification seals, as well as all other components necessary to obtain the final ready-to-market product are also added. It should be noted that, at this stage, bottles that are intended for the stage in bottles might still be bottled, without label. These bottles are the so-called “reserves”.

Storage

In this last stadium, the bottles are stored in appropriate places, according to the typology of each wine, and can remain there for a few days or a few years.

3. METHODOLOGY

The study was conducted at the *Adega Cooperativa de Mangualde*. It focused, in a first phase, on the survey of the strategic, tactical and operational actions developed in the period 2009 to 2016, included in the Activity Reports approved by the General Meeting. (Mangualde, Adega Cooperativa, 2009/2016)

In a first phase, the actions were grouped according to the anchor activities of the Supply Chain Suppliers (Development, Production and Operations, Equipment and Infrastructures, Customer Service, Stock Management/ Procurement, Transport/Storage and Information Management) (Carvalho, 2010). Then, its relative weight was calculated for each of the dimensions of sustainability (environmental, economic and social) (Almeida, 2005) and Rational Use of Energy.

Supplier development

- Proximity of suppliers of grapes (cooperating).
- Technical support in the preparation of projects and submission of applications.
- Protocol for the application of plant protection products.
- Accomplishment of courses for protection and integrated production.
- Short supply chains through the option of local suppliers.
- Management of pallets with suppliers.
- Larger orders made to the container (carton, bottles).

Production and operations

- Definition of the production process for the various types of wine.
- Optimization of productive capacity.
- Management of the temperature control system.
- Production of packaged goods planning.
- Daily optimization of productive capacity.

- Compliance with the rules of HSW⁷, namely risk products storage.
- Elimination of the diesel generator to supply energy in the grape harvest.
- Replacement of pipes for cold supply and insulation of existing ones.

Equipment and infrastructures

- Periodic maintenance of equipment.
- Wastewater treatment.
- Assembly of condenser batteries.
- Use of stainless steel tanks (less energy consumption in washes and less water consumption, therefore less water to be treated).
- Glazing of cement deposits (objective equal to the previous one and more thermal stability in wines conservation).
- Replacement of asbestos cover by isothermal sheet in the carton store (to avoid excess moisture on the carton).
- Optimization of layouts, in order to use natural light.
- Reduction of own fleet and replacement of the most polluting vehicles.
- Creation of open space, where the various departments work.
- Replacement of 110 existing luminaires by ponds.
- Placement of presence detectors.
- Placement of emergency lighting.
- Assembly of new electrical boards at the entrance and in the meeting room.
- Start-up of the new transformer substation
- Automation of the WWTP⁸.

Customer service

- Vinification in conjunction with the storage of the partners (to avoid transport and wines circulation between warehouses).
- Compliance management quickly and seamlessly.
- Winemaking by order, according to the client’s intention.
- Provision of packaging services in bottles or Bag-in-Box.
- Provision of laboratory services.

Inventory management

- Reuse of raw materials, whenever possible (legally and technically).
- Anticipation of the sale of wines in bulk (smaller stocks).
- Definition of safety stocks in finished product.
- Definition of minimum and maximum stocks of raw material.
- Use of picking for custom orders (exports from China, Brazil, etc.).
- Standardization of primary packaging.

⁵ Comissão Vitivinícola Regional

⁶ Instituto da Vinha e do Vinho

⁷ HSW (Health and Safety at Work)

⁸ WWTS (Wastewater treatment station)

- Uniform type of bottles for various brands.
- Computerization of the raw material stock management process.
- Computerization of the stock management process of finished products.

Transport/storage

- Routing of waste to recycling centers.
- Optimization of the layout and circulation inside the warehouse (shelves, smaller distances).
- Replacement of the stacker by an electric forklift.
- Handling of products inside the warehouse (pallet holder).
- Carrying grapes in suitable trailers (more safety, fewer trips, less carbon footprint, less paper handling in data handling).
- Rapid discharge (less pollution, economic gain for the cooperant).
- Direct deliveries “to the pallet,” by own fleet, for shorter distances.
- Subcontracting of the physical distribution of products over long distances.
- Route optimization and order grouping.
- Reuse of pallets.

Information management

- Use of new technologies for managing flows.
- Integration of oenology into production.
- Use of electronic invoices (SAPHETY platform).
- Electronic receipts.

- Wine information to the cooperators trough SMS (the cooperators became the “pilots” of their villages).
- General meetings operation.
- Use of the site for customer information.
- Use of the website to provide information to members.
- Use of facebook for disclosure of shares.
- Computerization of orders from customers and suppliers.
- Elaboration of industrial costing.
- Creation of procedures manuals.

In a second phase, in order to understand the impact of the main actions, some indicators were used (Initiative, Global Reporting, 2012) which allowed the elaboration of tables for each of the dimensions of sustainability, comparing the performances at the beginning and at the end of the study’s target period.

The reliability of the information was validated through the direct collection of the data, made by the authors of the work from official documents, made available by the entity in which the study was carried out.

4. RESULTS AND DISCUSSION

4.1. Environmental, economic, social and RUE environment

At the level of “Supplier Development” (Table 1), all actions are directly related to the environmental dimension, highlighting the importance given to the relationship with the main and only suppliers of grapes, the main raw material.

Table 1. Framework of Supplier Development actions

1. Supplier development		Environmental	Economical	Social	RUE
		100%	71%	71%	43%
1.1	Proximity of suppliers of grapes (cooperating)	x	x	x	x
1.2	Technical support in the preparation of projects and applications	x	x	x	
1.3	Protocol for the application of plant protection products	x	x	x	
1.4	Courses for protection and integrated production	x		x	
1.5	Short supply chains	x	x	x	x
1.6	Management of pallets with suppliers	x			
1.7	Bulk orders made to the container	x	x		x

Source: Authors

The activity “Production and Operations” is the most striking in this type of organization. The economic and RUE dimensions are the most important ones, with 88% (Table 2). The elimination of the electric power supply through the generator at harvest time was the measure with the greatest environmental impact, although it was economically penalizing, in the short term.

Table 2. Context of the actions of Production and operations

2. Production and operations		Environmental	Economical	Social	RUE
		25%	88%	13%	88%
2.1	Definition of the production process for different wines		x		x
2.2	Optimization of productive capacity		x		x
2.3	Management of the temperature control system		x		x
2.4	Packing production planning		x		x
2.5	Daily optimization of productive capacity		x		x
2.6	Compliance with HSW rules	x		x	
2.7	Elimination of diesel generator	x	x		x
2.8	Replacement and insulation of cold pipes		x		x

Source: Authors

The activity “Equipment and Infrastructures” registered the largest number of actions (15), most of them with environmental and social concerns (Table 3). The use of stainless steel tanks and the glazing of existing cement tanks are measures that will bring great benefits to any of the three dimensions considered, in the medium term.

Table 3. Framing of the actions of Equipment and infrastructures

3. Equipment and infrastructures		Environmental	Economical	Social	RUE
		67%	53%	67%	60%
3.1	Periodic maintenance of equipment		x		x
3.2	Waste water treatment	x		x	
3.3	Assembly of condenser batteries	x	x		x
3.4	Use of stainless steel tanks	x	x		x
3.5	Glazing of cement tanks	x	x		x
3.6	Elimination of asbestos cover	x		x	
3.7	Optimization of layouts for use of natural light	x	x	x	x
3.8	Reduction of own fleet and replacement of vehicles	x	x		x
3.9	Creation of open space for the various departments			x	
3.10	Replacement of lamps	x	x	x	x
3.11	Placement of presence detectors			x	
3.12	Emergency lighting placement			x	
3.13	Assembly of new electrical switchboards			x	
3.14	Start-up of the new PT	x		x	x
3.15	Automation of the WWTS	x	x	x	x

Source: Authors

In relation to the “Customer Service” activity, it was the one with the lowest number of shares, which is also the one where there is a lower percentage of actions with environmental implications (20%), as can be seen in Table 4. Personalization and Great flexibility in relation to customers, translated into the establishment of pre-harvest partnerships, are an innovative factor compared to the one practiced in the region.

Table 4. Framework of Customer Service actions

4. Customer service		Environmental	Economical	Social	RUE
		20%	80%	60%	40%
4.1	Vinification in conjunction with storage to partners	x			x
4.2	Quick and seamless compliance management		x	x	
4.3	Winemaking on demand		x		x
4.4	Packaging services provision		x	x	
4.5	Laboratory services provision		x	x	

Source: Authors

In the “Inventory Management/Procurement”, all actions implemented targeted the economic dimension and 78% the environmental dimension (Table 5). The picking and standardization adopted for the bottles and the boxes are important environmentally measures, also providing energy savings both upstream and downstream of the process.

Table 5. Stock management framework / procurement actions

5. Inventory management		Environmental	Economical	Social	RUE
		78%	100%	11%	44%
5.1	Reuse of raw materials	x	x		x
5.2	Anticipation of the sale of wines in bulk		x	x	
5.3	Definition of safety stocks in finished product		x		
5.4	Definition of minimum and maximum stocks of raw material	x	x		
5.5	Use of picking for custom orders	x	x		x
5.6	Primary packaging uniformisation	x	x		x
5.7	Uniformisation of the type of bottles for various brands	x	x		x
5.8	Computerization of the PM stock management process	x	x		
5.9	Computerization of the PA stock management process	x	x		

Source: Authors

Regarding the “Transport and storage” activity, 90% of the actions have an impact on the RUE and 80% on the environmental dimension (Table 6). All actions are of significant importance, especially as they are significant in the environment preservation.

Table 6. Transport/storage actions framing

6. Transport/storage		Environmental	Economical	Social	RUE
		80%	60%	50%	90%
6.1	Routing of waste to recycling centers	x		x	
6.2	Layout optimization and circulation within the warehouse		x	x	x
6.3	Replacement of the combustion truck by electric	x			x
6.4	Product handling inside the warehouse	x	x		x
6.5	Transport of grapes in suitable trailers	x	x	x	x
6.6	Download speed	x	x	x	x
6.7	Direct "pallet" deliveries for short distances	x			x
6.8	Subcontracting of the distribution over long distances		x		x
6.9	Route optimization and order grouping	x	x		x
6.10	Pallets reuse	x		x	x

Source: Authors

The last activity considered, “Information management”, was the second most important in terms of the implemented actions number (12). It should be noted that the environmental and economic dimensions are the most important, with 83% and 75%, respectively, against only 50% in RUE (Table 7). The abandonment of the role in many of the procedures is a practice that is recorded and praised. The way the general assemblies work and the associated pedagogical aspect allow a strong social scope, typical of this type of organization.

Table 7. Context of the actions of Information management

7. Information management		Environmental	Economical	Social	RUE
		67%	53%	67%	60%
7.1	Use of new technologies for the management of flows		x		x
7.2	Integration of oenology into production	x		x	
7.3	Use of electronic invoices (SAPHETY Platform).	x	x		x
7.4	Sending receipts by electronic means	x	x		x
7.5	Wine information to donors trough SMS	x	x		x
7.6	Operation of general meetings	x		x	
7.7	Use of the site for customer information	x	x	x	x
7.8	Use of the site to provide information to members	x	x		x
7.9	Use of facebook for stock disclosure			x	
7.10	Computerization of orders from customers and suppliers	x	x	x	x
7.11	Elaboration of industrial costing			x	
7.12	Creation of procedures manuals			x	

Source: Authors

When looking at data presented in Table 8, it can be seen that in the “Equipment and Infrastructures” activity, the largest number of actions (23%) was implemented, with “Customer Service” on the opposite side, with only 8%. As regards the different dimensions, it is clear that the “economic dimension” is of the highest importance, with a weighted average of 73%, followed by the “environmental dimension”, with 68%.

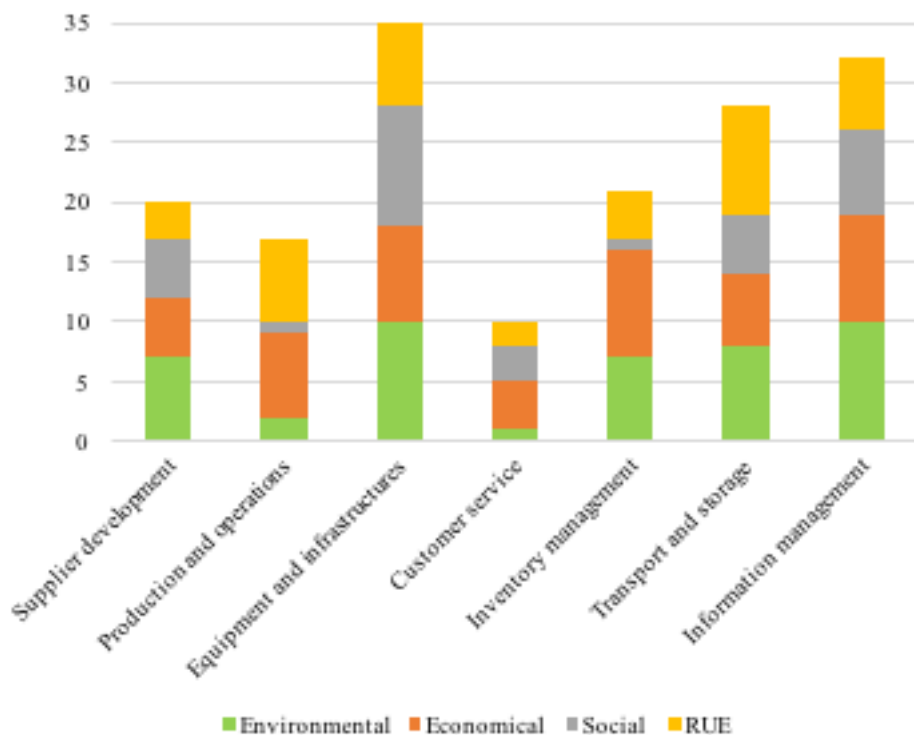
Table 8. Table summarizing the weight of activities and dimensions

	Activities	Qt.	Weight	Environmental	Economical	Social	RUE
1	Supplier development	7	11%	100%	71%	71%	43%
2	Production and operations	8	12%	25%	88%	13%	88%
3	Equipment and infrastructures	15	23%	67%	53%	67%	60%
4	Customer service	5	8%	20%	80%	60%	40%
5	Inventory management	9	14%	78%	100%	11%	44%
6	Transport and storage	10	15%	80%	60%	50%	90%
7	Information management	12	18%	83%	75%	58%	50%
		66	100%	68%	73%	48%	61%

Source: Authors

The stacked column chart, shown in Figure 7, shows the number of actions for each of the anchor activities considered in the study, allowing a better understanding of the values of the table, in Table 8. From its reading, it is emphasized that it is in “Equipment and Infrastructures” and “Information Management” that the dimensions considered have a greater balance.

Figure 5. Number of shares per activity and size



Source: Authors

4.2. Metrics for the years 2008 and 2016

Complementing all that was mentioned in the previous topics, some indicators (Santos, 2012) considered relevant for sustainability in the approached three dimensions (environmental, economic and social) were identified and the values recorded at the beginning and at the end of the period under analysis were collected.

The environmental dimension includes some metrics related to energy, water and recycling, showing a very positive evolution for most of the metrics (Table 9). In addition, worthy of special mention is the decrease in reactive energy, the strong increase of products delivered for recycling and the amount of water treated in the WWTS.

Table 9. Environmental Dimension metrics for the years 2008 and 2016

ENVIRONMENTAL DIMENSION	2008	2016	VAR.
Total energy consumed (kwh)	103.012	141.403	27%
Reactive energy (kwarh)	50.450	11.629	-334%
Fuel (liters)	9.393	1.218	-671%
Amount of treated water (liters)	1.110.653	1.538.462	28%
Oenological products and other chemicals	35.534	43.132	18%
Delivered products for recycling (kg)	3.480	6.920	50%
Green dot (euros)	8.583 €	6.634 €	-29%

Source: Authors

The economic dimension is the one that registers greater visibility and objectivity, being therefore strongly valued by the stakeholders of any organization. The ACM registered a remarkable recovery from a situation of imminent insolvency to sustained growth, supported by the various indicators referenced in Table 10.

Table 10. Economic Dimension metrics for the years 2008 and 2016

ECONOMIC DIMENSION	2008	2016	VAR.
Sales	1.859.181 €	1.425.436 €	-30%
Cost with staff	262.875 €	205.476 €	-28%
Energy costs (including fuels)	24.204 €	22.154 €	-9%
Customers	458.157 €	123.583 €	-271%
Providers	308.652 €	131.081 €	-135%
Membership	1.822.938 €	1.615.845 €	-13%
Total liabilities	4.403.024 €	2.382.643 €	-85%
Financial Services	1.559.481 €	530.789 €	-194%
Gross Margin	37%	41%	10%
Received grapes (ton)	1.569.590	1.960.530	20%
Wine produced	1.268.000	1.605.900	21%
Provision of winemaking services (ton)	0	412.360	100%

Source: Authors

Regarding the Social Dimension, the third dimension analyzed, some items were considered that allowed to verify if the actions implemented in this scope caused significant differences in socially valued behaviors. Table 11 shows that all the indicators have evolved very satisfactorily, with particular emphasis on the increase in qualifications and on the protection and integrated production, very well accepted and valued by the current society.

Table 11. Social Dimension metrics for the years 2008 and 2016

SOCIAL DIMENSION	2008	2016	VAR.
Registered Members	736	786	6%
Active members (who deliver grapes)	341	220	-55%
Integrated protection and production (ha)	0	47,22	100%
Accession to phytopharmaceutical products (producer no)	0	95	100%
Christmas dinner for members and families (no. persons)	80	156	49%
Board of Directors average age	68,66	48,66	-41%
Workers	14	10	-40%
Workers average age	46,71	49,18	5%
Workers average academic qualifications	21% sup.	37% sup.	

Source: Authors

Table 12 shows the amount and percentage of metrics with a positive effect on the organization's performance. Of the 28 metrics selected, 20 contributed positively (71%), with the Economic Dimension influencing the most on management success, with 83%.

Table 12. Summary table of metrics with positive evolution

	TYPES OF DIMENSION	Qt.	Positive metrics	%
1	Environmental Dimension	7	4	57%
2	Economic Dimension	12	10	83%
3	Social Dimension	9	6	67%
		28	20	71%

Source: Authors

5. CONCLUSION

The accomplishment of this work made possible, in an initial phase, an exhaustive survey of the main strategic, tactical and operational actions implemented during the last 8 years in the *Adega Cooperativa de Mangualde*, a cooperative institution of the wine sector of the Dão Demarcated Region in Portugal.

Of the 66 actions implemented, 23% focused on "Equipment and Infrastructures", followed by "Information Management" with 18%. Regarding the relation between actions with the different dimensions of sustainability and the Rational Use of Energy, it can be seen that, in general terms, the greatest weight is for the "Economic Dimension", with 73%, and for the "Environmental Dimension", with 68%. Considering the seven activities in an individualized way, it is the "Suppliers Development", in the environmental component, and the "Inventory Management/Procurement", in the economic component, which have a 100% ratio.

In the second phase of the study, a comparative study was performed between some metrics considered relevant for the three dimensions of sustainability, allowing a better perception of the effects of the various actions implemented. The different dimensions segmented the 28 metrics considered, with 12 being the Economic Dimension, 9 the Social Dimension and 7 the Environmental Dimension. The study identified that 71% developed positively, with a distribution of 83%, 67% and 57%, respectively.

The effect of the accomplishment and presentation of this work among the ACM staff was rewarding, although there has been great difficulty in collecting the data, especially due to the limited time available for the intervention. The awareness of people on this topic was of great importance, and provoked behavioral changes in daily life. Because it is a cooperative institution, with a specific management model of specific characteristics, this awareness of sustainability becomes even more important. For future studies, it is necessary to monitor, with the different stakeholders, the effect of the different actions, as well as the validation of the main metrics used and their framing in the various dimensions of sustainability.

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THE MACROECONOMIC BASED FINANCIAL IMBALANCE PROCEDURE OF EUROZONE AND THE STRUCTURAL EXPECTATIONS AFTER 2008

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ABSTRACT

In this study, we attempt to analysis macroeconomic imbalances process especially in Eurozone due to its some different features related to global financial crisis after 2008. The concerned different features put forth the alteration macroeconomic effects on the countries included in Eurozone, certainly that fact result in the being different these countries' structural expectations after 2008. It appears that ways of searching international stability and economic growth have determinative effects on the Eurozone together with some countries' government debts. Euro Plus Pact, as financial procedure based, consider tax competition in international agreement stability towards to economic growth in the scope of public and private financial obligations in limited access finance. In the addition, the other reason of based financial imbalance procedure is to also use the financial billfold-wallet for developing countries granting emergency loans to member states in return for the enactment of macro economic reforms. But it is forgotten that means that the Eurozone countries have some limited fiscal global integrations also to review of each its own national budget, which in the scope of the financial imbalances procedure.

KEY WORDS: eurozone; government debts; financial imbalances; financial crisis.

1. INTRODUCTION

Fiscal imbalances procedures have some characteristic features, according to the level of economic development, especially in developing countries that aim to catch the developed global economic integrations. Fiscal imbalance can be considered a mismatch between government revenues and expenditures as a classic approach, but today's current definitions means to include more than classics' approaches. As financial integration process fiscal imbalances can be taken in two terms as horizontal and vertical imbalance, but they can be considered in the differenced affect levels towards global process. Fiscal imbalances that are priority considered "Vertical Financial Imbalances" can be thought "Fiscal Gap", but as "Horizontal Fiscal Imbalances" means "Equalization" related to social differences. Fiscal imbalances concept taken place in our approach is certainly related to fiscal deficits in spite of the difficult measuring towards the crisis process. Therefore, this process should be detailed country by country due to the intergovernmental attitudes put forth fiscal transfers as largely comparative within descriptiveness analyses especially after 2009 financial crises. In interested in these financial imbalance dynamics the meaningful study has

been held by Comunale and Hessel (2014) in the scope of currency period.

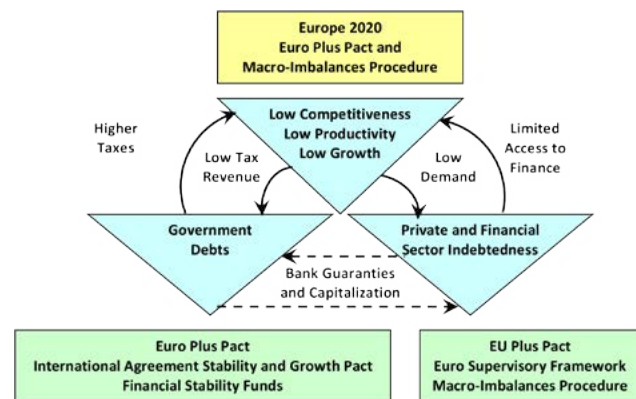
Financial imbalances' dynamics can never be considered as if it is only unique component to analysis global macro crises. All financial crises have the based-macro other components that depends on the social-economic factors. In other word, this fact feed also alternative interpretations of the global financial crisis related to macro based like income redistribution including the role of global imbalances relations with trade and capital flows (Corsetti and Mackowiak, 2006: 1320). Certainly, this phenomenon seems as a major cause of the crisis especially in developing countries. Even more, the related pattern of financial relations that include to financial distribution constitute should be considered to be the global ultimate causes that have been controlled via developing countries toward to determine some financial sanctions. Along with that, international trade is that is accepted one of the key through which the crisis has had a devastating effect on developing economies due to cause tax lost in financial declinations process (European

Commission, 2015: 1-2). Regarding important trade lost, developing countries generally have high trade-GDP lost ratios led to reason more financial lost as a percent of GDP throughout the related process as a conclusion of financial deviation. The structural financial features of every country get established these countries macro-economic aims within economic growth policies that can definitive vertical fiscal attitudes. In these countries, financial different fragilities are very important indicators that put forth by these concerned financial features in macro-economic objectives, and many macro-economic deviations based on financial structures are analyzed in this framework measuring especially in developing countries. Therefore countries that are at Eurozone should be tackled priority in their own financial fragility dynamics, and the principal financial applications, like taxes and government debts etc., this fact have to be well adjusted to the global integrating countries to ensure accomplishing deal with probably financial crisis (Gros, 2016: 2). However, the countries that are in Eurozone have to inevitable consider dealing with the requirement financial imbalances factors that cause the different altered in in the same financial imbalances due to the shared positive expectations (Gros, 2012: 4).

2. MACRO-IMBALANCE PROCEDURE IN EUROZONE AND THE STRUCTURAL RELATIONSHIPS ALONG PROCESS

As Eurozone to EU, it appears that the low interest rates is the most important risk component due to the more effective from banking operations in some countries like Finland, Denmark and Sweden. But, this appearing is not sufficient towards analysis of the macro-imbalances procedure, because of currency effects should be included as meaningful monetary operations for perceiving this financial procedure. In this context the decision making process of Government especially concerned with taxes cannot be considered different from these monetary options in the same process. In the starting points generally the structural analyses focus on the imbalances procedure that is from international reserves to interest rate rules, and fiscal imbalances in Eurozone are appraised by using the shadow exchange rate. Surely, this structural process, especially after bawling out financial crisis like devaluation, ensures the equilibrium conditionals to financial balances components in Eurozone via the alteration foreign exchange rates (Micossi, 2016). In developing countries lower economic growth and productivity cause more lower tax revenues in these concerned countries through the limited access to financial procedure. In addition, it appears that countries in Eurozone should establish stability between international agreement and probably macro-imbalances procedure especially in developing countries that have the highly government debts in order to account imbalances were indeed largely driven by demand booms related to the financial cycle. Figure (1) shows these macro-economic relationships below¹:

Figure 1. Macro-Imbalances Procedures and The Structural Relationships in The Process



Source: Author

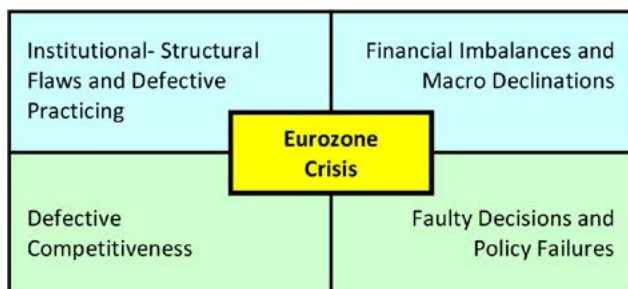
As seen on figure (1), the structural relationships put forth the infrastructure dynamics of macro-imbalances via the reciprocal influence institutional options financial contents. Certainly, in this case the definitive factor is government financial balances through private sector's financial balances location and international agreement stability in the same process. In addition, banks direct, as financial institutions, affect on the sectoral indebtedness are in the relationship facing one another related to capitalization process, which mean to figure the framework of macro-imbalances. A the other conclusion of fiscal imbalances is certainly low productivity with low economic growth in the Eurozone because of different uncongenial structural (Wyplosz, 2012: 9). This means that Euro has not the same effect in all the scope of EU leading especially the expected macro unbalances as budget deficits and current deficits. In the point of view, it cannot easily be said that Eurozone, after the wake of the financial crisis when expressed as a percentage of GDP, has the desired stability extension especially taken considering the different developing (Wyplosz, 2012: 8-9). In this context, Euro Plus Pact may contribute in the optimal structure in Europe 2020 to overtake the Macro-Imbalances procedure if European Unity may present more congenial the financial relationship towards to ensure the financial relationship wholness, which are refered to the scope of figure 1.

On the other hand, macro-imbalances procedure related to Eurozone financial relationship means the institutional flaws with competitiveness, and this concept results in policy failures process. In this context financial and monetary imbalances contains the crisis triggers resulted in which are in especially political making process with wrong decisions. These financial triggers have been the shocks to primary surpluses in devaluations with foreign nominal shocks process and the each structural alteration, especially developing countries, have increased these concerned financial dynamics' effects in the scope of poliitical failures. Absolutely, the institutional flaws have been the important reasons of Eurozone crisis in spite of financial competitiveness and also the each political lack

¹ <http://blogs.ft.com/the-world/2012/01/eurozone-crisis-live-blog-22/>

of success has directly affected the post-collapse path of interest rates. This financial formation in Eurozone give shape to the other financial factors, that means the long-term crisis cost in the competitiveness process in the spite of to be no longer in demand (Higgins and Klitgaard, 2011: 4). From this perspective, institutional flaws means to not put no longer to command popular approval and support the financial competitiveness which state the first step of Eurozone crisis. In addition, the countries in Eurozone have to satisfies the other equilibrium conditions via government budget constraint and of sufficient size relative to the imbalance using the own foreign exchange reserves (Chen et al, 2012: 8). Otherwise, the exchange rate will ne able to increase immediately being lost own currency values directed towards to pull trigger of Eurozone crisis. At this point the governments in Eurozone can postpone financial currency crises only if it has a enough stock of real financial of sufficient currency aimed at overcome. This is a condition emerging markets are less likely to satisfy than developed economies in Eurozone throughout institutional flaws (Chen et al, 2012: 7-8). Namely, it is clear that macro-imbalances in Eurozone are shaped by the not strong financial structure related to financial especially in developing countries considering the debts of governments and private and financial sector indebtedness. Figure (2) express the common relationship values related to financial competitiveness throughout policy failures process in Eurozone that the each of situations put forth financial crisis (Hübner, 2016)².

Figure 2. The Structural Components of Macro-Imbalances in Eurozone



Source: Author

As seen on figure (2), the defective competitiveness with policy failures that are obtained in the public decision making process constitute the infrastructure of Eurozone crisis process. There is also another point to note that Eurozone crisis not only is effected by these concerned dynamics, but this concept is effected via global financial negativeness. Increasing global interest rates and the deviations in the global trade transactions can also put forth macro-imbalances causing relationship in each other these countries (ECB, 2016: 58). In this context Mortgage financial crisis Can be given as a good example directed towards this process. In addition, the dynamics of financial adjustment given that take place in macro-imbalance process should have gone on by using meaningful the

monetary policies with shadow exchange rate and the shadow interest rate (Eichengreen, 2012: 134-135).

The faulty decisions and policy failures in public decision making process are the biggest obstruction put forth on this concerned approaches. In this respect, the development of the Eurozone financial markets and the overcoming of macro imbalances should be supported by a process that has been especaiily in the overcame structural by erroneous structural applications. And it is understood that the academic debates have been meant not only mono-causal explanations of the crisis then the political debate, but also it is structural explained the crisis simply with fiscal profligacy of governments. Nevertheless, we should categorize as a public debt crisis in the spite of majority of scholars that have not categorized the eurozone crisis because of the considered financial structure coming up with quite a financial range of root causes (Chen, 2012: 7-8). Therefore Eurozone as an expression of the structural crisis need to put forth the alteration dynamics of financial imbalances and macro declinations and balance the institutional flaws with practicing versus macro-imbalances (Chen, 2012: 11).

3. THE RELATION CYCLE OF MACRO-IMBALANCES PROCESS AND ITS STRUCTURAL FLOW

The macro-imbalances process not only is occurred from the institutional flaws with defective practicing, but includes the relation cycles related to the imbalances dynamics in Eurozone. Also, GDP determines, as the most important indicator, all the evaluation process to deal with imbalances dynamics, which put forth especially the level of economic growth. In addition external imbalances components and negative endogenous policy problems have made an impact on the market competition process that cause price fluctuations as a meaningful causing imbalances process in Eurozone.

3.1. The Cyclic Qualifications of Macro-Imbalances in Eurozone

The reason of meaningful deviation private sector investment has been this concept, which can be categorized as the greatest failure in the history of European integration in terms of economic and social costs. And also the public debts can be accepted, as endogenous financial dynamic, in the term sovereign crises effecting macro-imbalances process. Because the economies of Eurozone countries were economies with relatively low levels of public debt ratios at the onset of the crisis. But Greek financial crisis trigger the other countries of Eurozone manipulating to increase more private-public debts with their liquidity crises (Argyrou, M.G. and Tsoukalas, J.D., 2011: 177). But, it should be forgotten that current account surplus able to be financial crisis matter in fact that some countries in Eurozone have caused the fiscal drag that mean locking in the economy due to policy failures.

² <http://politics.oxfordre.com/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-154>

This case is the reason of structural and institutional failures and this phenomenon can be considered and defined in the scope of the Eurozone as consisting of Germany, France, Austria, Belgium, and the Netherlands. Certainly these structural imbalances have required putting forth some financial reforms together with the new corporate search in Eurozone countries because of this case surely created the conditions for increased divergence including the period the euro preparation years related directly to GDP. So, the common financial applications in Eurozone that include also monetary policies put forth to need institutional alterations related to the other macroeconomics policies but, before all things consider crisis policies in the same period (Perez and Scherpereel, 2016: 1162)s. Along with that the liquidity crisis with debt policies have been in contradiction for a while and this fact is an important reason of the relation cycle of macro-imbalances.

The previously stated public debt ratio was considered possibly miscalculated to move the euro into the crisis zone, but this phenomenon is still a heavy financial burden that effect on the common financial occurring for Eurozone. It appears that Countries that are in Eurozone need more policy responses, and multi-level crises management based on institutionally effecting. It should be suggested by these considered countries a comprehensive analytical framework that may guide current as well as future research in the operating of an incomplete currency union. In addition the macro-imbalances crisis has been limited via political approaches in the basis for a severe political misreading (Ares et al, 2016: 1103). This situation has been resulted in problematic economic policy responses turning into changed the character of financial crisis versus the main steps of the expected original crisis (Dawson, 2015: 980). Even, according to some analysts this structural alterations, occurs the brake effect on the economic growth of these countries in Eurozone and their seemed effects on the actual economic development cause to deviate the concept of the endogenous of optimum currency area criteria (Dawson, 2015: 989-990).

3.2. The Institutional and Political Cyclic Flowing Related to Macroeconomic Imbalances Procedure in Eurozone

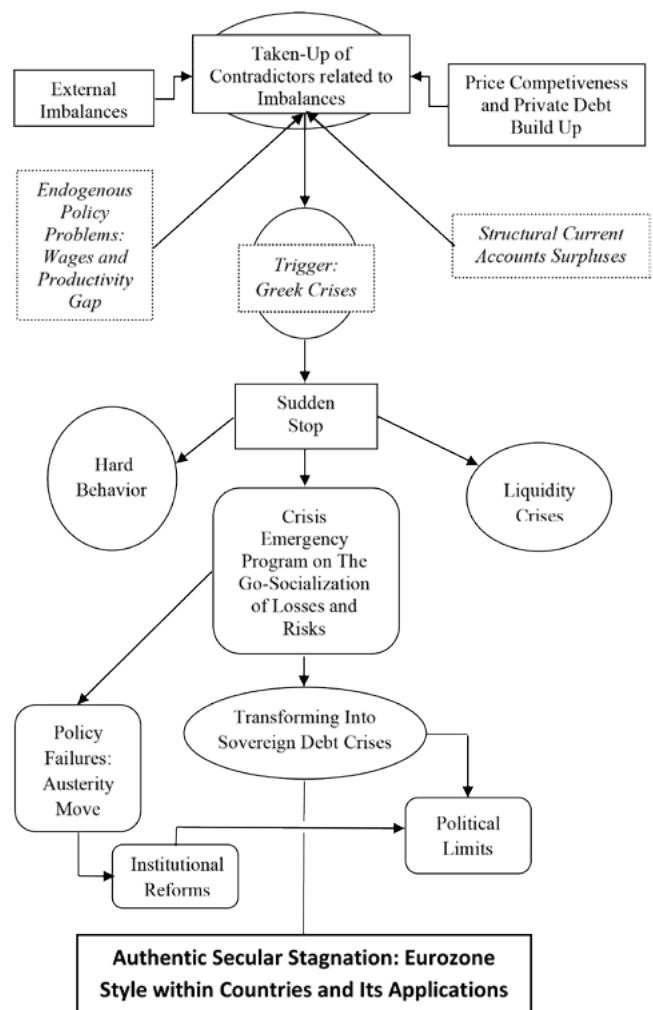
These effects had targeted to put forth actually seen as confirmation of a functioning currency union where private markets arranged adequate capital flows between financial surplus or deficit economies in the spite of the different structural changes with objections in Eurozone countries. As that context the structural financial cycles of macroeconomic related to financial imbalances includes hard the private financial institutional behavior. This point means that of private credit markets turned into more being under financial obligation of the Eurozone as a trigger financial component (Eyraud and Lusinyan, 2013: 572). Therefore, the Eurozone financial crisis, using these

all cycles' dynamics can be categorized, as stated the various national forms of financial crises.

This perception can be stated the different in terms of economic and social cost that means the different forms of crisis perception in Eurozone (Ferrara, 2016: 1238-1239). This structural flowing process include not the probable fiscal imbalances caused by devaluations because of only include the institutional relations, which state that especially institutional relations cause macro-imbalances process. Even more, we need to attract attention that the institutional and political cyclic flowing trigger and cause thought differing factors, and these considered factors are in mutual relationship. On the other hand, it should not forget that it is a crisis of economic institutional governance, and thus an institutional crisis that needs fundamental institutional changes (Drudi, 2012: 2).

Figure 3 the institutional put forth the relations whole of in the political flowing framework related to macro-imbalances process below (Hübner, 2016)³:

Figure 3. The Institutional and Political Flowing of Financial Macroeconomic Imbalances in Eurozone



Source: Author

³ <http://politics.oxfordre.com/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-154>

Figure 3 emphasizes the macroeconomic imbalances also including financial policies with institutional practicing in Eurozone, which means is in the scope of probable political failures. Especially, we should emphasize that banking practicing takes place important area in lender economies that threatened to develop into imbalances as a the outcome was a wide-range liquidity crisis of the banking sectors. All the financial practicing in Eurozone related to macroeconomic imbalances requires fundamental changes in national policy preferences. This situation must be supported via as well as the ability to fundamentally in the scope of political reforms toward a coherent Eurozone-wide strategy. But, after 2008 financial crisis it has not been this approach take into consideration in full within the applicate policies related to solve imbalances positions. This structural approach can be commented in two term related to Eurozone process.

First, the previously stated public institutional applications within debt ratios require the new definitions that ensure the new global financial move the euro into a critical crisis zone. The negotiations on this concerned topics in Europe financial commission should considered including new financial formations together with new financial institutions (Copelovitch et al, 2016: 830). Because, the elements of macro imbalances cannot be defined in the only approach the global financial variations with their effect levels are consider required into in imbalances process. In other words, to simply characterizing the imbalances emerging Eurozone crisis due to an unforeseen loss of confidence on the side of macroeconomic relations can result in the unexpected some levels? All the institutional analyses should emphasis why it does cause for the loss in confidence toward to the future of Eurozone (Leupold, 2016: 87-88). Namely, as seen on figure 3, all the currently process of the probable imbalances should be tackled together with all the macro relations, and should be deal with the Eurozone crisis is not seen as a simple result of spillover effects from the global financial crisis (Baglioni and Hurrelmann, 2016: 109).

Second, the required most important applications should emphasis the components of Crisis Emergency Program on the go-socialization of losses, which means to prevent the probable risks transforming into sovereign debt crisis (Ruffert, 2011: 1778). In reality, as seen in figure 3 the most of these elements highlight particular mechanism of the macro triggers cause negative effects imbalances process, that are relevant. However, a the alternative procedure, to look at each crisis of member economies separately in Eurozone, can be reasonable way out of

this methodological macro relation whole in this tricky situation (Lane, 2012: 63). In addition, it can be said that another distinguishing feature of the macro-imbalances effects is that the monetary application effects on the real economy were meaningful and effect much deeper than in the earlier monetary policies. As seen on figure 3, as political and institutional feature, this context means to need the institutional-politics reforms of cyclic following, but must be remoting from complex corporate structure remote from the complex structure in cyclic following (Copelovitch et al, 2016: 830).

4. CONCLUSION

The macro-imbalances processes in Eurozone have emerged in both institutional applications and financial-policies practices. All the financial macro-imbalances create different macro effects on the countries that are in Eurozone, and especially after 2008 global crisis, monetary relationships should be obligatory to be interrogated again due to the problems in practice for Euro have increased compared to before. It appears that EU Plus Pact Euro Supervisory Framework Macro-Imbalances Procedure has not sufficient to ensure the optimal Euro practicing via Euro currency policies. Also, the amortization process of transforming into sovereign debt crises for countries in Eurozone, especially when they owe in Euro, cause the important problems in the scope of wages and productivity costs as endogenous policy problems. Certainly this phenomenon is accepted as a meaningful reason for macro-imbalances like Greece. And also the required fundamental changes in countries' national policy preferences affect negatively on the willingness of these considered countries towards the common currency applications. This situation creates complexity to coping with the macro-imbalances to the fundamentally piecemeal political reforms toward a coherent Eurozone-wide strategy. At this stage, what it must be done, it should balance to common formations between national crisis emergency program on the go-socialization of losses and risks and Eurozone currency policies. Taken-up of contradictors related to imbalances have to be supported via the taken into account different currency effects because of Euro currency create the different criteria in the different countries in Eurozone related to the difference in development process. The continuation of national half-hearted reforms should be created a common groundwork via Eurozone currency policies in the obligations framework of Euro Plus Pact International Agreement Stability and Growth Pact Financial Stability Funds for coping with macro-imbalances in Eurozone.

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WINE ROUTES: DEVELOPMENT OF WINE REGIONS AND LOCAL COMMUNITIES

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ABSTRACT

Wine tourism an emerging tourism product, has an increasingly important role in the wine regions' development and promotion (Bras, 2010). Wine tourism was born from the union of two completely different industries (Hjalager & Richards, 2002): wine industry which is typically oriented to the product and for the wine production and tourism which works to accommodate the tourist. Each wine-growing region has been developing various forms of wine tourism, through wine fairs and festivals, the constitution of wine museums and enoteca / interpretation centers, visits to wineries and cellars, visits to vineyards and farms, wine tastings, wine-growing spas, wine-growing villages and wine routes (Costa, 2014). Wine routes are privileged instruments for the organization and dissemination of wine tourism (Correia, 2005), were created in Europe from the post-war period (Hall & Mitchell, 2000) and comprise one or more signaled pathways that run through a wine region (Brás, Costa, & Buhalis, 2010). Wine routes can help redesign the economies of rural areas (Scherrer, Alonso, & Sheridan, 2009), are an important tourist product in the world (Correia, Passos Ascenção, & Charters, 2004). The National Tourism Strategic Plan (2012), have on the analysis of the great trends of international demand, identified the gastronomy and the wine as one of the ten strategic products for the development of the national tourism (MEE, 2012). The cultivation of vines and the consumption of wine in Portugal are older than their own nationality (Hall & Mitchell, 2000). Wine consumption is associated with relaxation, social interaction and hospitality (Barber, Taylor & Deale, 2010). Portugal is one of the largest wine producers in the world (IVV, 2014). Wine production is one of the activities that have contributed most to the development of the economy (Guedes, 2006). The wine routes are one of the most visible aspects of the practice of wine tourism in Portugal (Simões, 2008). They were created by the initiative of wine producers in 1993 to increase the promotion and sale of their products and to develop the tourism potential of the different wine-growing regions in several areas, such as: culture, history, traditions, built heritage and landscape (Costa & Kastenholz, 2009). Wine routes are nowadays considered as a tourism product with great potential for the development of tourist destinations (Jurincic & Bojnec, 2009). This work aims at analyzing wine routes as a means of developing wine-growing regions, economically, socially and environmentally, and as an opportunity to promote positive images of wine-growing regions, using as a methodological support a literature review. It is also intended to propose an empirical study of the two aspects of wine routes in Portugal: (i) supply, in particular the characteristics and conditions of the routes; and (ii) search, specifically the profile of the wine tourist, his motivations, image of the wine tourism destinations and their degree of satisfaction.

KEY WORDS: Wine tourism, wine routes, development, wine regions, local communities.

1. INTRODUCTION

Wine routes are privileged instruments for the organization and dissemination of wine tourism (Correia, 2005), were created in Europe from the post-war period (Hall & Mitchell, 2000) and comprise one or more signaled pathways that run through a wine region (Brás, Costa, & Buhalis, 2010). Wine routes can help redesign the economies of rural areas (Scherrer, Alonso, & Sheridan,

2009), are an important tourist product in the world (Correia, Passos Ascenção, & Charters, 2004).

The National Tourism Strategic Plan (2012), have on the analysis of the great trends of international demand, identified the gastronomy and the wine as one of the ten strategic products for the development of the national tourism (MEE, 2012). The cultivation of vines and the consumption of wine in Portugal are older than their own

nationality (Hall & Mitchell, 2000). Wine consumption is associated with relaxation, social interaction and hospitality (Barber, Taylor & Deale, 2010).

Portugal is one of the largest wine producers in the world (IVV, 2014). Wine production is one of the activities that have contributed most to the development of the economy (Guedes, 2006). The wine routes are one of the most visible aspects of the practice of wine tourism in Portugal (Simões, 2008). They were created by the initiative of wine producers in 1993 to increase the promotion and sale of their products and to develop the tourism potential of the different wine-growing regions (Marques, 2001), in several areas, such as: culture, history, traditions, built heritage and landscape (Costa & Kastenholz, 2009).

This work aims at analyzing wine routes as a means of developing wine-growing regions, economically, socially and environmentally, and as an opportunity to promote positive images of wine-growing regions, using as a methodological support a literature review. It is also intended to propose an empirical study of the two aspects of wine routes in Portugal: (i) supply, in particular the characteristics and conditions of the routes; and (ii) search, specifically the profile of the wine tourist, his motivations, image of the wine tourism destinations and their degree of satisfaction.

2. WINE TOURISM

In the decade of 90 of century XX appeared the first definition of wine tourism, as a special interest trip focused on wine mediated by the characteristics or attributes of a wine region and wine tasting, or both (Macionis, 1997). Later, other researchers concluded that wine is the main motivation offered to tourists when visiting a wine region, for which they define wine tourism as visits to vineyards, wineries, wine and grape festivals and events, to taste wine and / or to experience the attributes of a region (Hall & Macionis, 1998). This tourism product is based on the attractiveness of a region, its attributes, patrimonial characteristics, landscapes and wines produced (Van Westering, 1999).

Wine tourism is part of the Gastronomy and Wine sector and is characterized by a significant number of activities that provides the tourists' contact with the culture of vine and wine, such as: wine-growing activities, wine products and landscape heritage, and architecture (MEI, 2007).

The culture of wine is part of the cultural and social history of a territory is an element of Portugal identity. There are some objects and archaeological sites that testify to the production of wine in Portugal since medieval times (Marques & Eusébio, 2007). Portugal is one of the largest producers and exporters of wine worldwide (IVV, 2014). Wine production is one of the activities that has contributed most to the development of the economy (Guedes, 2006).

However, wine tourism is currently comprised of a wide range of activities (Clemente-Ricolfe, Escribá-Pérez, Rodríguez-Barrio, & Buitrago-Vera, 2012), such as:

- (i) Economic - purchase of wine (Alant & Bruwer, 2004) and local products (Getz & Brown, 2006);
- (ii) Cultural - visits to museums, interpretive centers of wine and vine culture (López-Guzmán, Vázquez de la Torre, Caridad, & Ocerin, 2008), tastings wine and local produce in the wineries (Brunori & Rossi, 2000);
- (iii) Tourism - participation in wine fairs and festivals (Bruwer, 2014), visits to wineries, cellars (Hall & Mitchell, 2000), vineyards (Bruwer, 2003), monuments (Correia et al., 2004) and natural heritage (Ravenscroft & Van Westering, 2001);
- (iv) Social - visitors have contact with the experiences and local traditions, and local residents (Carmichael, 2005);
- (v) Sports - horse riding, cycling (Correia et al., 2004) balloon rides, and extreme sports (Gonçalves, Completo, Moreira, Reis, Gustavo, & Aureliano, 2016);
- (vi) Health and well-being - the wine has antioxidant properties, the consumption of wine and its derivatives, for therapeutic purposes as a component of wellness / spa centers (Gonçalves, et al., 2006; Higgins & Llanos, 2015);
- (vii) Pedagogical - visitors have the opportunity to learn something about wine and its culture, within an educational experience logic (Bruwer, 2003; Charters & Ali-Knight, 2002).

Wine tourism is not exclusive to the rural world. Many of the activities developed for wine tourists are also carried out in urban spaces (Inácio, 2007). Wine festivals and fairs, for example, are short-lived events (Bruwer, 2014), which generally take place in urban spaces (Vaz, 2008), being important marketing tools for wine-growing regions and for the individual wine producers (Bruwer, 2014). It is also an opportunity for local communities to promote their identity and tourism resources abroad (Inbakaran & Jackson, 2005), to create brand awareness, loyalty, educate, entertain and encourage future visits (Bruwer, 2014). The wine routes are another example of activity very much sought after by wine tourists in rural and urban environments, they even have the beginning and end in urban spaces, for the most part. Some cellars, museums and interpretive centers for wine and vineyards are strategically located in cities with medium or high population densities (Vaz, 2008).

This increasing in wine-related activities makes the concept of wine tourism more comprehensive, as it is a vast array of experiences built around visits to wine regions or wine-related events - which include wine tasting and experience of a wide variety of cultural activities and of lifestyle (Geibler, 2007).

3. WINE ROUTES

The wine routes are one or several signposted itineraries that cover a well-defined area - region, province and denomination area, congregate wineries, vineyards, wine tasting centers, wine museums and rural accommodation, that connect different winery properties and wineries of a certain area (Bruwer, 2003). They are the result of a collective action (Correia, et al., 2004), of public and private interests for the constitution of one or several itineraries, inviting visitors to discover wines and activities of a specific region.

The routes can be traveled by bicycle, horse, car or other means of transport, allowing contact with the cultural and natural heritage of a certain region (Getz, 2000), to contemplate the vineyards, to enter a museum, to taste the typical gastronomy of the region and to visit interpretative centers of wine and vineyard (García, López-Guzmán, Ruíz, & García, 2010). In this context, wine routes are an important marketing tool (Jurincic & Bojnec, 2009) for the dinamization of wine regions, for the preservation of the authenticity of each region through the dissemination of

handicrafts, landscape, architectural, museological and gastronomic heritage (Costa & Kastenholz, 2009; Inácio, 2010).

Since the post-war period wine routes were extended, in particular, to all European wine-producing countries (Hall & Mitchell, 2000). Most of the wine routes created on the "Old Continent" were almost always the initiative of wine industry entities that wanted to increase the promotion and sale of their products and with financial support from the European Community (Correia, 2005).

The implementation of wine routes in Portugal started in 1993, together with eight European regions, under the Dionisios International Cooperation Program promoted by the European Union in the framework of CAP reform - Common Agricultural Policy (Simões, 2008). Later, in 1996, the first wine route - Port Wine Route (Lourenço-Gomes, Pinto, & Rebelo, 2015) was inaugurated. Currently, according to the Tourism of Portugal, there are 12 wine routes, which mostly bear the name of the wine or the wine region where they have been implemented (MEE, 2011), with different varieties of wine, and also, with particularities Historical and cultural (see Table I)

Table 1. Wine Routes in Portugal

Wine Routes	Inauguration	Head office	Coordinating Entity
Wine Route of Porto	1996	Peso da Régua	Wine Route of Porto - Association of Adherents
Route of the Vineyard and the Wine of the West	1997	Óbidos	Region of Tourism of the Center / Office of the Route of the Wine of the West
Green Wine Route	1997	Porto	Center for Information and Promotion of Green Wines
Wine Route Alentejo	1997	Évora	Office of the Alentejo Wine Route
Wine Route Dão	1998	Viseu	Regional Wine Commission of Dão
Route of the Vineyard and the Wine of Ribatejo	1998	Santarém	Association of the Route of the Wine and Vineyard of Ribatejo
Vineyard Route of the Beira Interior	1998	Guarda	Regional Wine Commission of the Beira Interior
Vineyard Route of the Cister	1998	Moimenta da Beira	Regional Wine Commission of the Távora Varosa
Wine Route of the Bairrada	1998	Anadia	Bairrada Wine Commission
Wine Route of the Costa Azul	2000	Palmela	Mother House of the Wine Route
Wine Route of the Bucelas, Carcavelos e Colares	2003	Bucelas	Regional Wine Commission of the Bucelas, Carcavelos e Colares and Municipality of Loures
Wine Route of the Algarve	2014	Lagos	Algarve Wine Commission

Source: Authors

Wine routes present a set of similar offerings: wine tasting and sale, visits to wineries, vineyards, museums and thematic collections when they exist (Simões, 2008). In addition to wine, along the wine routes, tourists can enjoy the beauty of the natural landscape, farms and the richness of its historical, architectural and cultural heritage, unique and rich gastronomy (Correia, 2005; ICEP, 2000).

Despite apparent dynamism and organization, wine routes aren't still a consolidated product. There are few cellars and restaurants with infrastructure and services suitable

for tourism activity, such as opening hours, signalization, suitable places for visits, wine tastings and events, and with qualified personnel who speak foreign languages fluently (THR, 2006). It is also common for wine producers themselves or their families to carry out visits to the wine cellars. In general, there are no employees assigned to the winery in direct contact with the public (THR, 2006).

The wine routes comprise a diverse group of members: associations of winegrowers, cooperative wineries, warehouses, winemakers, producing farms, rural tourism

enterprises, restaurants and other centers of winemaking interest, which are organized in a network (Brás, 2010). With different states of development and growth (Correia, 2005). The development of wine routes can provide added value at various levels, for winegrowers, cellars and wineries, for the wine-growing regions and for the local community.

The wine is usually identified by its designation of origin, and therefore, like tourism, it promotes certain regions and destinations (Bras, 2010). The wine routes can be assumed as a complete destination, bringing together the main attractions of wine, gastronomy, cultural heritage, housing, a schedule of events, planned activities and a set of territorial service offering, essential components for promoting tourism in a wine-growing region (Correia, 2005).

4. METHODOLOGY

The wine routes, which have existed in Portugal since 1996, constitute a tourist product with great potential for the development of the wine regions. This paper analyzes the 12 wine routes in Portugal in a methodological framework proposed to evaluate the various aspects of the implementation, maintenance and sustainable use of the routes and the sustainable development of the local communities where they are inserted. It is proposed to use a check list proposed by Getz (2000). According to this author, the wine routes should follow the following principles:

- (i) The wine route should be easy to navigate;
- (ii) Provide maps and guides and place signs along the route;
- (iii) Associate activities (accommodation, catering, animation, etc.) and resources to the route to improve visitor satisfaction;
- (iv) Facilitate the use of the route by all, that is, visitors and residents;
- (v) Establish links with other local, regional and national routes or circuits;
- (vi) Integrate in the route planning the strategies of the activities, equipment and services that belong to the route;
- (vii) Engage public and private partners and investors;
- (viii) The circuits should facilitate the management of the visitors' flow, avoiding high concentrations of visitors in a given location and encouraging the preservation of more sensitive or fragile areas;
- (ix) Define the reception capacity of visitors on the route and in the region;
- (x) Develop marketing strategies from the implementation of the route in order to identify and capture the most indicated market segments;
- (xi) Establish permanent monitoring and maintenance of the pre-defined strategy, including gathering feedback from visitors and agents on the route.

This checklist together with other measuring instruments will allow access to a number of key aspects in assessing the relationship of wine tourism operators with the routes, places and destinations they visit in their wine tourism activities. It is intended to complement the use of that instrument with a questionnaire to evaluate the following aspects of wine tourists:

- (i) Sociodemographic profile of the wine tourist in Portugal;
- (ii) Motivation of wine tourists specifically push and pull factors (Alant & Bruwer, 2004); Cohen, 2009; Correia, Oom do Valle, & Moço, 2007; Galloway, Mitchell, Getz & Ong, 2008; Getz & Brown, 2006; Hanqin & Lam, 1999; Jaffe & Pasternak, 2004; Lau & McKercher, 2004; Mohammad & Som, 2010; Silva, Abrantes & Lages, 2009);
- (iii) Image of affective and cognitive destination (Kim & Richardson, 2003; Sonmez & Sirakaya, 2002)
- (iv) Level of satisfaction, more specifically perceived value (Bruwer, 2003; Gallarza & Saura, 2006; Kastenholz, 2002; Lee, Yoon, & Lee; 2013), Overall Satisfaction (Bruwer, 2014; Jaffe & Pasternak, 2004; Tassiopoulos, Nuntsu, & Haydam, 2012) e Loyalty (Getz, 2000; Yoon & Uysal, 2005);
- (v) Future intentions of behavior, including intentions to return and recommend especially in the e-WOM (Abrantes, Seabra, Lages, & Jayawardhena, 2013).

5. EXPECTED RESULTS AND CONCLUSIONS

At present, rural areas are becoming depopulated due to rural exodus and emigration. The outflow of people from rural areas has brought enormous imbalances to the economy, society and the environment (Correia, 2005). In recent years, some strategies have been developed to keep local traditions, customs and lifestyles alive, and to revitalize agricultural spaces (Costa & Kastenholz, 2009).

Wine tourism should not be restricted to wine-growing units with the capacity to receive visitors. It can play an important role in regional development; it can help prevent desertification and the constraints of some rural areas. The wine tourism can alleviate socio-economic imbalances and improve the quality of life of local communities, support traditional culture, promote the recovery of historic sites and the territorial conservation. Taking into account its importance, it is necessary to analyze consumer behavior and especially what may motivate tourists to look for wine destinations.

Thus, the study of the supply and demand of wine tourism assumes itself as fundamental. On the supply side, it is important to understand the state of wine routes in Portugal, its strengths and weaknesses in order to better understand where to act. On the demand side it is fundamental to know the wine tourism in Portugal, who they are, how they behave and what they want. The results of this study are important for destination managers and organizations that want to obtain competitive advantages

in this market. It will be possible to build marketing strategies, specifically, segmentation, communication, distribution and product design more appropriate to this demanding but equally lucrative market. As a suggestion of future research, it is recommended to know and understand the needs of wine tourism companies and the quality of the services offered by these companies to tourists.

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PRICING TACTICS OF GROCERY RETAILERS AS THE DRIVER OF TACTICAL CONSUMER RESPONSE

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ABSTRACT

Price is the most sensitive element of marketing mix for consumers, but also the fastest and easiest element to change, and consequently, easiest to copy by competitors. Retail pricing is quite challenging since it includes large number of products in retailers' assortment. While strategic pricing relates to setting the regular prices and manage targeted price image, tactical pricing relates to daily price changes in very competitive environment. Price promotions are marketing and promotional tool commonly used by contemporary retailers all over the world. They have a special importance for grocery retailers who use Hi-Lo price strategy with a goal of attracting consumers in the store and increasing store turnover and profit. Without meaningful and clever management of price promotions retailers can face profit issues, e.g. due to the lack of impulsive purchases of products that are not at a price promotion. The latter can be associated to the consumers whose behaviour has been affected by regular price promotions. Therefore, the goal of this paper is to investigate consumers' attitudes and behaviour towards price promotions at grocery retailers. With this intention, the survey questionnaire was conducted among 305 consumers whose answers were analysed using SPSS statistical software. Results suggest that consumers usually shop at multiple retailers, more precisely 3.8 retailers on average and that price promotions can be the main reason of attracting consumers to the store, but mostly for the occasional shopping, not regular. Furtherly, at majority retailers, largest impression regarding prices for the occasional shoppers leave the prices of individual products. At this level of managing prices of individual products and their price promotions, which is mostly a part of pricing tactic, consumer loyalty is not likely to be built. In addition to previous, consumers are more educated about prices and the main motives for their seeking of favourable prices are that they want to behave rational and are accustomed to price promotions.

KEY WORDS: retail price, pricing tactics, price promotion, consumer behaviour, consumer loyalty.

1. INTRODUCTION

With the ease of changing the price in retailing, especially comparing to other marketing and retail elements, comes the opportunity but also the danger of those changes. Usually those price changes are temporarily in some form of reduced price and can be seen as a part of pricing tactic. Retail environment additionally challenges pricing with the large number of individual products offered to the consumers, highly competitiveness (especially among grocery retailers) and various possibilities of price changes. Due to many possibilities of price changing, pricing tactics can have a significant role in retailers' success.

Tactic itself is defined as "a way of doing things so as to be at an advantage" (Business Dictionary, 2017) or "an action or strategy carefully planned to achieve a specific end" (Oxford Dictionaries, 2017). Therefore, pricing tactic in grocery retail should be planned, ensure the advantage

over the competitive retailers and satisfy both consumers (loyal and potential ones) and retailer. Furtherly, Grewal & Levy (2008) define the price as "the overall sacrifice a consumer is willing to make to acquire a specific product or service". Thereby arises the question what presents the sacrifice for individual consumer, or more important targeted consumers? Some consumers are more willing to invest their time in research of the offer, comparing prices and catching the time limited special price promotions, while others are more willing to pay the price with minimal other sacrifice or investment such as their time, traveling to the store or fuel consumption. As Hinterhuber and Liouzu (2014) state, most of the companies see pricing as a win lose situation between consumers and them, what should not be an issue if companies are consumer oriented.

The goal of this paper is to investigate consumers' attitudes and behaviour towards price promotions at grocery retailers. The research questions of the paper are:

- Is it become a rule that consumers purchase at multiple retailers? At how many?
- What are the main reasons for usual and occasional purchase at certain retailer?
- What leaves the largest impression on usual and occasional shoppers regarding prices for a certain retailer?
- Are consumers accustomed to price promotions?

For this purpose, the indicative research was conducted among 305 consumers whose answers were analysed using SPSS statistical software.

2. LITERATURE REVIEW

Pricing tactics could be perceived as a retailers' manoeuvre to ensure some kind of win situation for them. They are often called promotion tactics (e.g. Jalili, 2017) since they usually imply some kind of price reduction from the regular price offer. One of the most often used pricing tactic is price promotion which American Marketing Association (2017) defines as "the advertising of a price for a product or service and usually, the price being promoted is a reduction from a previously established price and may take the form of a lower price, a coupon to be redeemed, or a rebate to be received". As the examples of promotion tactics, Jalili (2017) lists coupons, quantity discounts, bundling, rewards program. Rewards program furtherly leads to consumers' loyalty, which is always one of the most desirable outcomes for retailers. Consumers' loyalty and repeated purchase (retail patronage) are one of the key factors that retailers are competing with each other and trying to build a recognizable program within their own company.

Pricing issues should be complementary with all other parts of retailer's strategy, brand and image. Ailawadi and Keller (2004) emphasize three areas that affect the image of a retailer within the price as part of the retailer's brand:

- the price level perception of the store,
- the price format (price strategy) of retailers (EDLP or Hi-Lo) and
- price promotions - their frequency, strength and variety of assortments they encompass.

The price level perception and the price format can be seen more as strategic areas, long-term decisions, while price promotions are area of tactical pricing issues and short-term decisions. Price promotions are usually used by Hi-Lo (high-low) retailers for products that have potential to attract large number of consumers in the store. Although their objective is that most of those consumers will buy other products on regular prices, cherry pickers consumers who are present on the market could spoil their plans. Those consumers research price offers, compare and buy only during special price promotions (Popkowski Leszczyc et al., 2004; Fox & Hoch, 2005). In turn to consumers' cherry picking, retailers seek out ways to compete through pricing tactics and provide the deals that offer the most

value to consumers (Grewal et al., 2012). Price promotions are seen as a critical in the management of the fast-moving-consumer goods (Breiter & Huchzermeier, 2015) with special emphasize on their profitability for retailers. However, they can be useful when retailers want to make a seasonal clearance, whereby price promotion at the point of sale such as additional displays is more effective than store flyers (Gázquez-Abad & Martínez-López, 2016).

Encouraged by necessity, availability or rationality, many consumers became more eager to research and educate themselves about various pricing issues. Consumer responses to pricing tactics are affected by the level of accurate/inaccurate knowledge held for such tactics (Hardesty et al., 2007). Kachersky (2011) reports how consumers awareness is growing regarding unit price increase (through price increase or content reduction) because they are becoming more educated due to the technology usage. Pozzi also (2013) emphasizes the role of technology and development of e-commerce which eases price comparison between retailers. Due to increased transparency and less possibilities for differentiation through prices or assortment, Ahmetoglu et al. (2014) emphasize the importance of price "design" as a pricing tactic through which retailers can influence consumers' perception and purchase decision, since many consumers' purchase decisions are often more based on perceived price than the actual ones (Danziger et al., 2014). This could be supported with price image on a strategic level, the price level of overall retailers' assortment (Hamilton & Chernev, 2013) that retailer achieved in consumers' perception.

Nijs et al. (2007) researched the drivers of retailer pricing (for a focal brand) over time, thereby including competitive retailer activity, pricing history, brand demand, wholesale prices and category management. Brand demand (made by consumers) proved to be very important price driver for retailers' pricing tactics, second after pricing history, with certain variations depending on product category and brand. Watson et al. (2015) state that many implications of changing prices are unfamiliar, especially regarding competitor and consumer responses to them, which additionally encourages usage of history pricing. This goes in favour of the theory of Passivity Pricing in grocery retail sector they developed which includes consumer price sensitivity as a context and the unpredictable nature of consumer response as one of the causes of passivity. Consumers' responses to retailers' pricing tactics can be strongly impacted by their goal orientation that can be promotion-focused (eagerly pursuing advancement) or prevention-focused (watchfully avoiding mistakes) (Hardesty et al. 2012). The same authors researched price-matching guarantees as one of the pricing tactic regarding consumers' goal orientation and conclude that retailers can raise consumers' prevention orientations for a short time, in order to increase their preferences for PMGs over regular prices. Furtherly, by framing price-matching guarantees, they can influence that consumers perceive their offer as promotion oriented if their consumers are promotion-focused.

3. RESEARCH METHODOLOGY

The main goal of this paper is to research consumers' attitudes and behaviour towards price promotions at grocery retailers. Therefore, targeted respondents were household members who purchase FMCG products, most often bought at grocery retailers. The primary research was conducted on the convenient sample of 305 respondents of two counties in Eastern Croatia in February

2017. For that purpose, highly structured questionnaire as a test instrument was used in two versions, online through Google Forms template and paper questionnaire. The research included six out of ten largest FMCG retailers in Croatia. These six retailers have around 60%, while top 10 retailers have more than 80% of the market share. All of them are nationally present on the Croatian market. The table 1 shows description of the survey sample.

Table 1: Sample description (Authors)

		n	%
Gender	Total	305	100
	Male	66	21.6
	Female	239	78.4
Age	Total	305	100
	18-29	51	16.7
	29-39	75	24.6
	39-49	67	22.0
	49-59	79	25.9
	60 and more	33	10.8
Education	Total	302	100
	Primary school	9	3.0
	High school	116	38.4
	Faculty and higher	177	58.6
Monthly income of all members in household	Total	302	100
	Less than 650 €	69	22.6
	650– 1,400 €	170	55.7
	1,400 € and more	63	20,6
Employment status	Total	305	100
	Employed	252	82.6
	Unemployed	25	8.2
	Student	9	3.0
	Retired	19	6.2
Members of household	Total	304	100
	1	42	13.8
	2	75	24.6
	3	83	27.2
	4	68	22.3
	5 and more	36	11.8
Housing	Total	305	100
	Apartment	147	48.2
	House	158	51.8

Source: Authors research

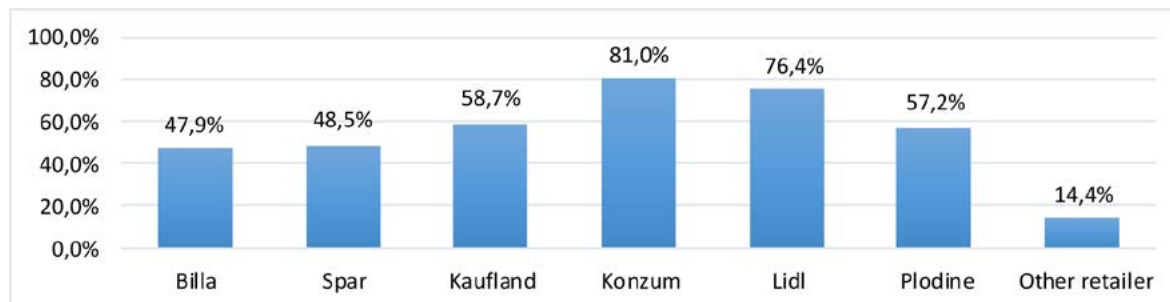
The obtained data were analysed using SPSS statistical software and research results are in the following chapter.

4. RESEARCH RESULTS

To find out at which retailers respondents purchase, they were asked to mark all retailers where they purchase at least once in a few months (graph 1). Most of the respondents purchase at Konzum (81%), followed by Lidl (76.4%). The least number of the respondents shop in Billa (47.9%) and Spar (48.5%). "Other retailer"

was marked by 14.4% respondents and usually those were small convenient stores in the respondent's neighbourhood. Summing all marked retailers and dividing it with the number of respondents obtain the average of 3.8 retailers per respondent.

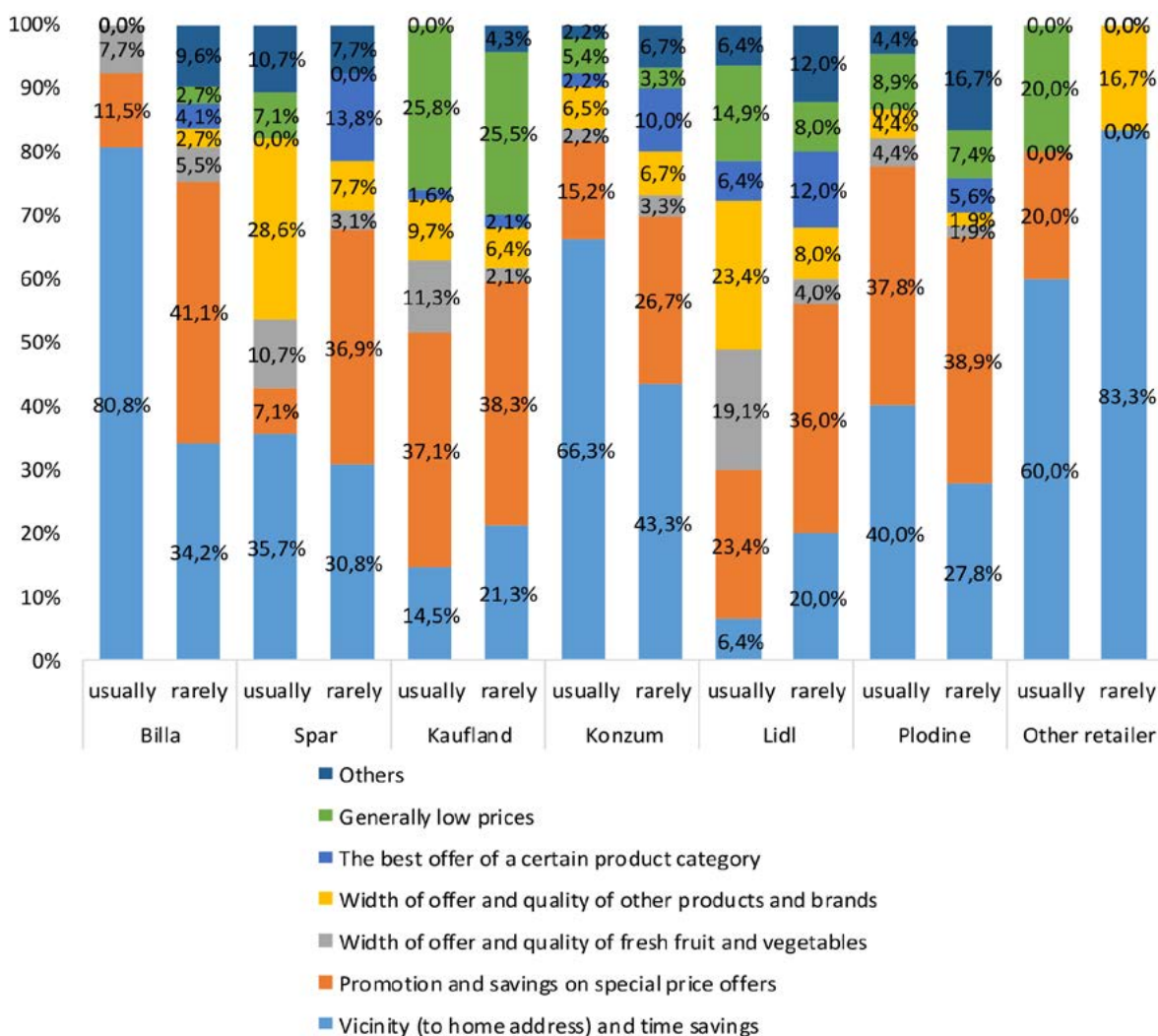
Graph 1. Retailers where respondents purchase



Source: Authors research

Graph 2 shows the main reason for the purchase at a certain retailer (each respondents chose two retailers, one for the most often and one for the rarest or occasional purchase). It provides a comparison of the main reasons with regard on the frequency, for the respondents who usually purchase at a retailer and those ones who do it rarely.

Graph 2. The main reason for purchase at certain retailer – comparison of usual and rare purchase



Source: Authors research

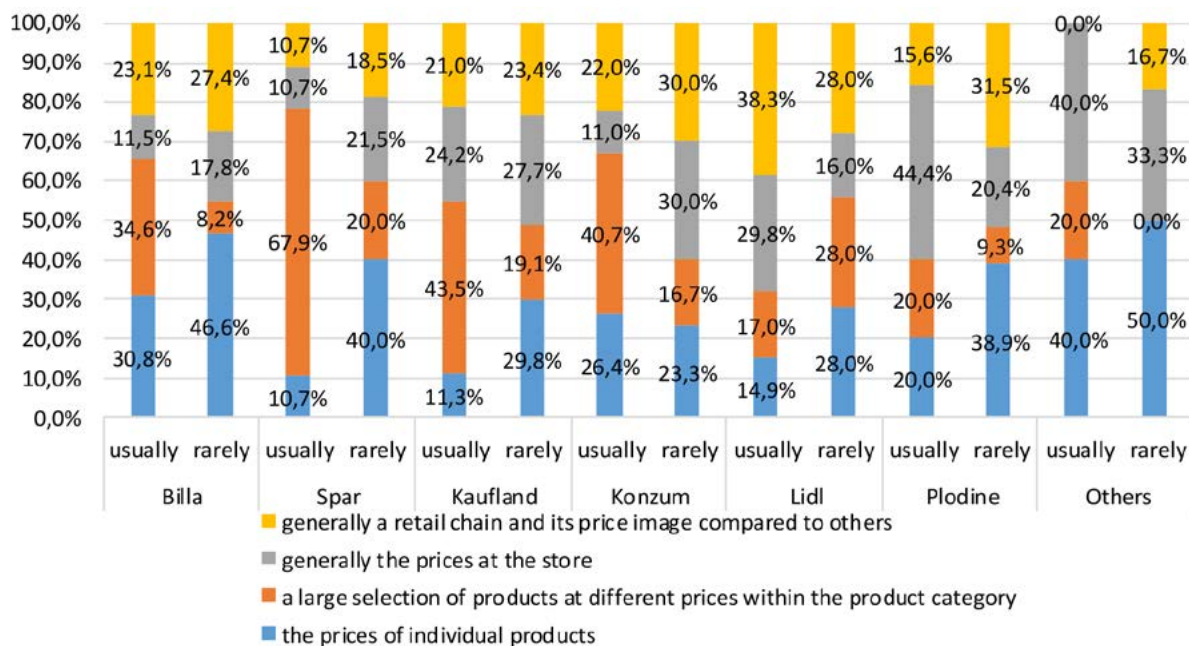
When it comes to the main reasons of usual purchase, *vicinity (address of residence and time saving)* is the dominant reason for Billa (80.8%) and Konzum (66.3%). Vicinity is significant reason for Plodine (40%) and Spar (35.7%) too, but *price promotion and savings on special price offers (37.8%)* are highly present for Plodine, while in Spar *the width of offer and quality of the product and brands (28.6%)*. The price element is especially highlighted in Kaufland, where for the main reason are prevalent *price promotion and savings on special price offers (37.1%)* and *generally low prices (25.8%)*. For Lidl equally represented as the main reasons are *price promotion and savings on special price offers (23.4%)* and *the width of offer and quality of the product and brands (23.4%)*.

The dominant reason for the occasional purchase (rarely; even when they purchase there, why do they purchase?) is *price promotion and savings on special price offers* for

Billa (41.1%), Plodine (38.9%), Spar (36.9%), Lidl (36%) and Kaufland (28.3%), while for Konzum the dominant main reason is *vicinity (43.3%)*, as it is for the usual purchase too. *Vicinity* is also highly represent for Billa (34.2%), Spar (30.8%) and Plodine (27.8%), while for Kaufland *generally low prices (25.5%)* attract occasional shoppers to the stores.

Graph 3 gives a comparison with regard to the frequency of purchases and the biggest impression on prices that some retailer leaves on the respondents. For those respondents who make usual purchases at a particular retailer, the biggest impression on prices generally leaves a *large selection of products at different prices within the product category, for Spar (67.9%), Kaufland (43.5%), Konzum (40.7%) and Billa (34.6%)*. For the respondents who most frequently buy in Lidl, the biggest impression leaves *generally a retail chain and its price image compared to others (38.3%)*, while for Plodine *generally the prices at the store (44.4%)*.

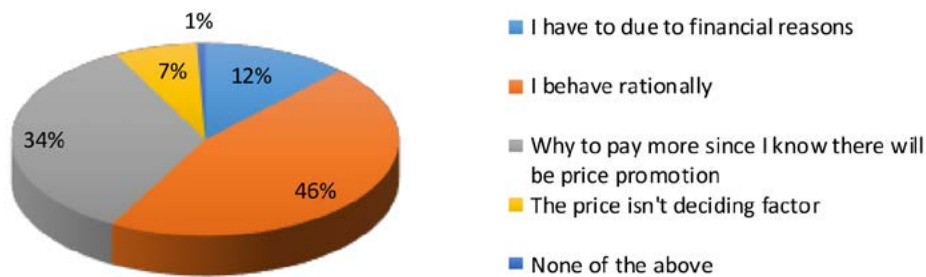
Graph 3. The biggest impression regarding prices for a certain retailer



Source: Authors research

Conversely, when taking into consideration respondents who rarely purchase at certain retailers, the biggest impression on prices generally leave *the prices of individual products*. In the case of Billa it is 46.6%, Spar 40%, Plodine 38.9% and Kaufland 29.8%. For Konzum, equal impression leave *generally the prices at the store (30%) and generally a retail chain and its price image compared to others (30%)*. In the case of Lidl, for the same percentage of respondents (28%) biggest impression leave *the prices of individual products, a large selection of products at different prices within the product category and generally a retail chain and its price image compared to others*.

Graph 4 shows the consumers' reasons for searching of low prices. The prevailing reason is that consumers are trying to behave rationally (46%), while the second most often reason is that they don't want to pay more since they know there will be price promotion (34%). Although one would expect larger percentage of consumers to search low prices due to finance, 12% of respondents chose it as a reason, while for only 7% of respondents price isn't deciding factor.

Graph 4. Reasons for searching for low prices

Source: Authors research

The obtained and described results are discussed in the following chapter.

5. DISCUSSION AND CONCLUSION

Competitive retail environment, economic situation and consumers' life style suggest that it is a common thing that consumers purchase at multiple grocery retailers. However, the obtained result of 3.8 retailers on average is to some extent surprising. By linking that with the cognition that large share of respondents don't want to pay regular prices since they have become accustomed to price promotions, it can be concluded that significant share of respondents is "at least some kind of cherry pickers". To some extent, this is in line with Watkins (2016) who state that consumer "promiscuity", often purchases at various retailers and overall less purchased quantity, is hurting retailers' performance. However, these results could be connected to the limitation of this research which is conducted in the developing country and more precisely, only in its one, economically poorly developed region.

Despite the fact that due to their retail formats most of retailers, such as Plodine, Billa or Konzum have notably wider and deeper product assortment than Lidl, it is the second retailer for whom *the width of the offer and the quality of the products and brands* are the main reason for the usual purchase. Although discounter retail format (low prices, narrow assortment and not one-stop retailer), Lidl managed to build loyalty among consumers not only based on low prices, but also on a unique offer through its private label products. With its specific price "design", whose importance is emphasized as a pricing tactic (Ahmetoglu et al., 2014), Lidl differentiate itself from other retailers by not using usual forms of price promotions which are just lowered regular prices.

Location as a 'traditional' success factor in the retail industry (Marinescu et al. 2010) is once again proven for Konzum and Billa, whose loyal consumers mostly choose these retailers because of locations of its stores, thereby putting assortment and pricing reasons partially in the background. However, stores location and their vicinity is the dominant main reason for occasional purchase in Konzum, too.

In support of the theory of cherry pickers goes the fact that for all retailers, besides Konzum, the dominant main reason for occasional purchase is *price promotion and savings on special price offers*. Even when consumers make a purchase at these retailers where they usually don't purchase, it can

be noticed that price promotions are the ones that have attracted them to the store. One could expect that most of those consumers will buy some other products too, which are not on price promotion. But, taking into account that they were attracted primarily by price promotion makes them to some extent cherry pickers. By identifying such consumers who are at least occasionally attracted to their stores due to a certain price offer, retailers could create a more personalized offer for them and try to turn them into more loyal consumers. Pricing tactics in their case have more significant role than in the case of Konzum whose store locations are of greater importance for consumers. Nevertheless, considering that it is about grocery retail and products of everyday consumption, location and gravity area are extremely important factors that must be taken into consideration for all retailers.

A look on what leaves the largest impression on prices (graph 3), clearly shows that consumers like to have a choice between cheaper and more expensive products. *Large selection of products at different prices within the product category, generally the prices at the store generally a retail chain and its price image compared to others* are the three levels that have higher importance on loyal consumers, at least watching only the frequency of purchase at certain retailer, not the share of that purchases in the total consumption. For the consumers who purchase occasionally, the largest impressions leave *the prices of individual products*. Previously suggests that at this level of price managing (mostly a part of pricing tactic) consumer loyalty is not likely to be built and in that case it is also probably about cherry pickers consumers. If possible due to their retail format, retailers should provide consumers enough pricing intervals, at least for key product categories, in order to increase consumers' loyalty.

Limitations of this indicative research are that it focused only on price promotion as a pricing tactic and the frequency of purchase, not the share in total consumption. Further limitations are the representativeness of the research sample in several variables, use of basic statistical methods for interpretation of obtained data and research focus on small geographic area. Future research could give more attention on consumer response to various pricing tactics, such as rewards and loyalty programs or coupons.

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GAINING STRATEGIC BALANCE BETWEEN INIMITABILITY AND LEGITIMACY IN GENERATING INNOVATIVE BUSINESS MODEL

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ABSTRACT

This work analyses a case of Japanese construction equipment company as a successful introduction of new business model as servitization process in traditional manufacturing industry. Servitization is defined as a phenomenon in which services are occupying a larger part of the added value in customer offerings (Vandermerwe & Rada, 1988). Servitization in the manufacturing company often requires radical business model transition. Business model must be contrived which can be characterized by several design themes and design elements (Zott & Amit, 2009).

The design themes capture the common threads that orchestrate and connect the focal firm's transactions with external parties. These contribute for customer's profit to deliver efficiency, lock-in, reciprocity, and novelty. The design elements involve transactional content, structure (activity links), and governance with other stakeholders.

Novel business models refer to new ways of conducting economic exchanges among various stakeholders that could lead to inimitability. Less strategic similarity through servitization design could increase differentiation and inimitability. However, novel business model innovation also requires more strategic similarity as legitimacy for its diffusion and social acceptance. Low legitimacy diminishes the ability of a firm to acquire resources from potential exchange partners in the business model. Legitimacy challenges occur because the firm's servitization strategies reject the conventional wisdom that is incorporated in the industry consensus. As a result, adopting novel design themes and elements needs to balance between inimitability and legitimacy and generate moderately novel configurations of design elements (Deephouse, 1999, Snihur & Zott, 2013).

Prior research findings on servitization emphasized on mainly efficiency as a design theme and product-service system's contents as a design element, based on static empirical studies. As the methodology, we adopt more holistic and dynamic view of servitization phenomenon in this paper. Our research focuses on the issue of strategic balance in a Japanese company in terms of design themes and elements of servitization business model.

KEY WORDS: instagram, food, social eater, social media marketing, impression management.

1. INTRODUCTION

The purpose of this study is to show some managerial notices on servitization process by showing a case of Japanese construction equipment manufacturing company. It has been known that servitization is one inevitable imperatives in highly developed economies because value of goods is getting decreased in such economies. Manufacturing companies should better to find another way to profit. The way is servitization. This case suggests that servitization is better to analyse as a business model analysis.

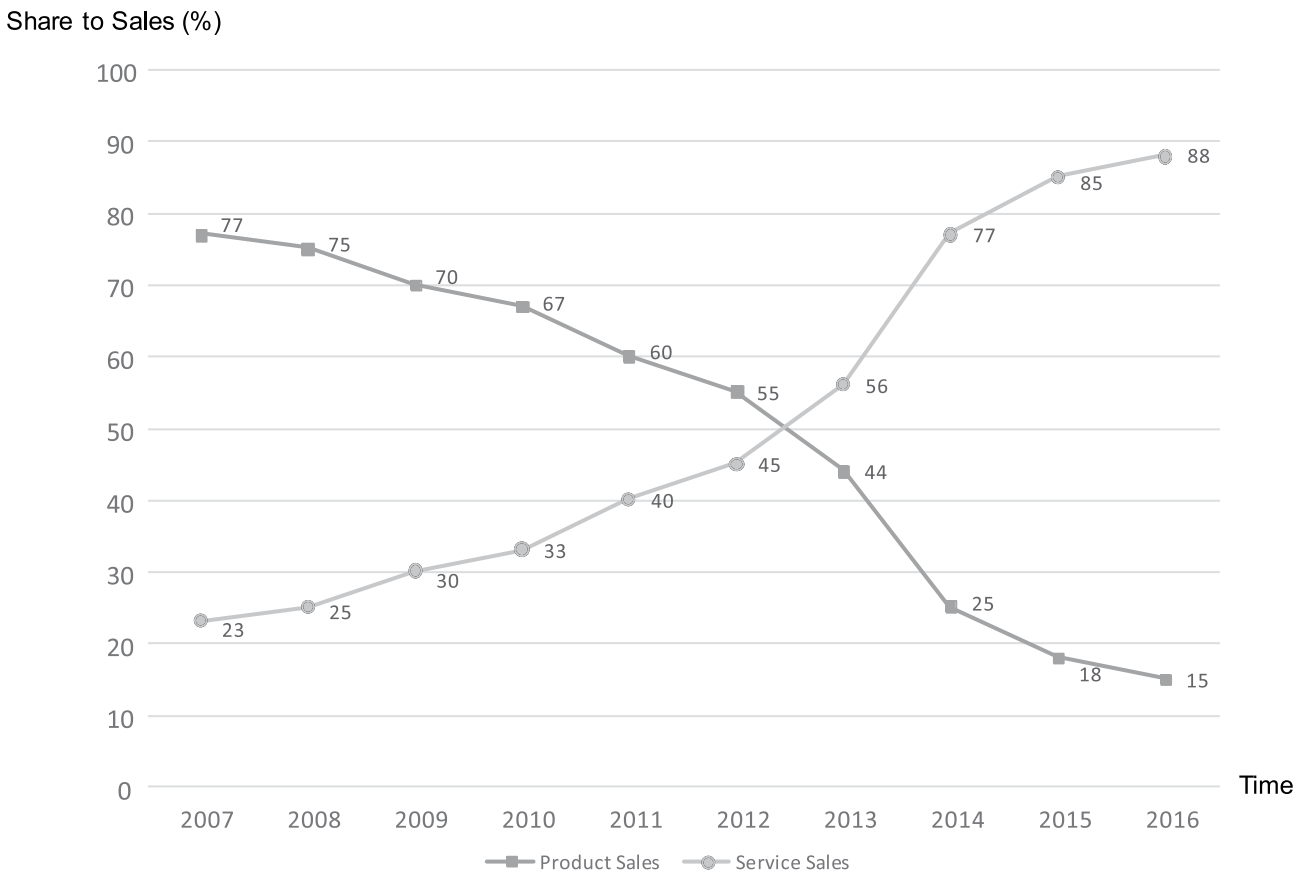
Servitization is defined as a phenomenon in which services are occupying a larger part of the added value in customer offerings (Vandermerwe & Rada, 1988). In short, it can be said that servitization is the transition process in which profit contribution has been getting shifted from product selling to service providing in a manufacturing company. There are companies, which add peripheral service such as maintenance and repair and rental, integrating product and service, and even completely shifting from a manufacture to the solution service company. Servitization process inevitably occurs under highly developed

capitalization circumstances. Such circumstances are basically characterized by changing relative cost structure in manufacturing sector in the world. Under this condition, a product rapidly decreased its substantial value because country with relative low (labour) cost also can produce competitive (actually alternative) products. This sometimes is called commoditization.

Typical case of servitization can be seen in a computer manufacturing company. Through intensive work on computer manufactures by Cusumano (2004), he revealed

that all companies tended to shift their business focus from products to software. According to their findings, Suarez, Cusumano, & Kahl (2013) reported that manufacturing firms (product firms, in their paper) switched the focus on services in which their performances reached an “inflection point”. Inflection point, here, means a certain point where the contribution to performance of additional services changes from negative to positive. They estimated that to happen when services reach approximately 56% of a software product firm’s total revenues. His findings can be abstracted as Figure 1.

Figure 1. A conceptual scheme of abstracted servitization process



Source: Abstracted by Authors based on Cusumano (2004)

Figure 1 is an abstracted example. It is constructed by two axes. A horizontal axis refers to time. In this time, the axis depicts years since 2007 to 2016 as the example. A vertical axis refers to share to sales, in general. In detail, this shows two shares of sales: share of product sales to total sales and share of service sales to total sales. This figure implies that product sales share is getting decreasing since 2007 to 2016. Specifically, when share of service sales reached approximately 56% in 2013, its share rapidly increased.

Many successful cases on servitization have been reported, and several conceptual frameworks as well. However, these discussions implicitly are assumed that servitization can be achieved easily. Or, at least, the process of servitization can be planned and managed rationally. In this paper, through a case study of Japanese company, we will point out some other discussions. Our case study will treat with Komatsu Company, the second largest construction equipment

manufacture in the world. Now Komatsu is known as one of the leading companies which developed and introduced IT maintenance service in construction equipment industry. Therefore, there are a lot of successful anecdotes about Komatsu, and highly applauded it.

Compared to these applauses, this paper will point out the difficulty of transition toward servitization, namely, business model transition. Because differently from theoretical recognitions of business model, practical business model operations always encountered some resistances and oppositions, even interruptions. Although business model studies have been conducted many times, seldom negative assertions of business model studies with some empirical evidences have been insisted on, not only an empirical study, but also a case, so far. This is the reason that it will be better to focus the business model studies on these managerial difficulties should be research focus.

As the evidence, there were few persons who could understand competitive meaning and importance about IT maintenance service in the beginning of introduction, even in Komatsu's director board. To understand this transition difficulty, this paper will develop a conceptual framework. Furthermore, this paper suggests the difficulty why servitization is difficult. Some difficulty stems from strategic balance between novelty and legitimacy of business model. As explained later a few more details, servitization inevitably accompanies with business model innovation. Here, innovation means new combination of something in the company (Schumpeter, 1912/1934). Business model innovation is characterized by design theme, which describes the patterns of design elements. Mainly managerially and economically, or it can be said, sometimes politically within the organization, design theme seldom worked as originally planned. Rather it can be regarded as the continuous substantiation process by the evidences.

To achieve this purpose, it is better to organize this paper as follows. First, related previous studies will be reviewed. Specifically, frameworks and definitions of servitization and business model studies shall focus on in section 1. Second, to share the business conditions and situation in Japan, a case study and related methodology will be introduced in section 3. The case study here treats with Komatsu LTD (hereafter, Komatsu). Komatsu is one of the leading construction equipment manufacturers in the world. This case study is not only interesting as the case itself, but also theoretically challengeable. Then, findings and theoretical interpretations will be discussed in section 4. In section 5, we will discuss on some findings from the case with the analytical framework. In turn the last section 6, we will conclude the findings and our discussion.

2. RELATED PREVIOUS STUDIES

This section will discuss on some frameworks and definitions. Though we focus on the difficulties of servitization process, recent several servitization theme employed successful cases and discussions. Of course, business related papers, even for a pure theoretical one, are required to show some managerial implications. At that time, it is easy to understand for showing successful cases as managerial lessons. However, failure became a mother of success, failure includes as much lessons as successful cases do. At least, we will be able to suggest some difficulty to transform a servitization company.

2.1. Framework and definitions of Servitization

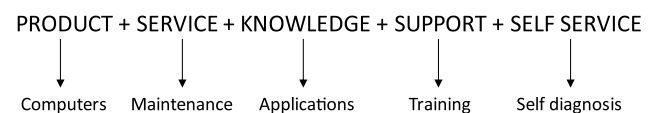
Servitization for a manufacturing company has been suggested since early 1980s. Some early studies on this theme indicated and classified the differences and similarities between products and services. As one of the earliest works, Shostack (1982) suggested product/service combinations by the molecular modelling approach. The

molecular modelling approach was a description method which separated product and service elements, respectively, from an entity. Here, the entity means, actually, a product, but he connoted it as a total physical object with some function. Through conceptualized by molecular modelling approach, the entity can be decomposed by physical elements and functional elements (these are actually service offerings). For example, an automobile can be decomposed by three elements: a vehicle and options and extras as the product; transportation as a service element. Thus, this method can create the essential evidences which are yielded by the entity. Though he emphasized on product/service combinations, there still remained managerial method how it achieved.

Vandermerwe and Rada (1988) was one of the earliest works on servitization. They not only insisted on service offering with product as inevitable way, but also showed servitization contents. According to their opinions, servitization was consisted of five elements (module in their term), goods, services, support, knowledge, and self-service. Goods is the hardware. In orthodox business model, a manufacture produced this hardware and sold it. Then, it earned sales and gained profit. People believed that hardware as goods contained value for money as sales and profit. Services are intangible value for customers through using hardware. Support is additional offerings to use hardware and services. The support sometimes helps hardware use effective. Knowledge refers to know-how for using hardware. Customers inevitably learnt what the hardware was for through using hardware. This sometimes is called an application of hardware. A glass is not only for drinking water, but also a vase for flowers. And the last one is self-service. Self-service is the result from the support and knowledge. Customers are getting accustomed to use the hardware. They can use it as more than the original hardware. These elements can be described as an example as below (Figure 2).

Figure 2. A servitization example

Manufacture (e.g. computers)



Source: Vandermerwe and Rada, 1988, p.317, Figure 1

However, an important thing for this paper and real business management is to know what is successful transformation and how it is possible. Reinartz & Ulaga (2008) described this transformation process. Their model included four steps. The first one was to recognize service offerings in the products. Many manufacturing companies have already delivered services, but few realized. The second one was to make the back office (industrialized, in their term). Here, the back office means to make service production processes. Important is that, here, this production processes might notice on over customization. The third one was to organize

a sales force. Here, the sales force should be service-savvy organization. For this, to make incentive systems that promote service sales are effective. And, the fourth one is to focus on customers' processes. This process would be completed by having detailed descriptions of core customer concerns and operating processes.

Though Reinartz & Ulaga (2008) successfully formulated servitization from the manufacturing company, there were still some questions for practical servitization processes, otherwise no company failed. Indeed, it is not true. Servitization is not easy work. Ulaga and Reinartz (2011) suggested how manufacturing companies could combine goods and services successfully. They focused on management resources (capabilities in their term). Here, management resources in their meaning were referred to the abilities which could develop to generate the combined offerings (hybrid offerings in their term). Through 22 interviews to key decision-makers in manufacturing companies on organizational activities to develop hybrid offerings, they summarized mainly five distinctive capabilities: service-related data processing and interpretation capability, execution risk assessment and mitigation capability, design-to-service capability, hybrid offering sales capability, and hybrid offering deployment capability.

Although above formula seemed to suggest with successful servitization process, we still know several unsuccessful cases and difficulties for servitization process. Recently, it is known as business model transformation (sometimes innovation) of organizations. Because there are a lot of differences of organizational structures between manufacturing and service companies, respectively (Hagel & Singer, 1999).

2.2. Framework and definitions of business model innovation

Business model is traditionally defined as an abstract representation of an organization, be it conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently and in the future, as well as all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives (Al-Debei, El-Haddadeh, & Avison, 2008, pp.8-9).

However, such general definition often is not only manageable, but also difficult to understand the differences from standard and normal business practices. Most companies did so, do so, and will do so. Thus, the time can be traced back to early 1980s to find this kind of business model and similar concepts (Porter, 1985). Though business model focuses on several linkages among stakeholders around the focal company, Porter's value chain analysed several functions within a company.

Compared to such general definition, we focus on, rather, more manageable and even operational definition because this paper will adopt with a practical case study. This case study can provide complement lessons on the conventional business model understandings. Slywotzky & Morrison (1997)

introduced 22 manageable and operational business models (business design in their term). According to their opinions, the business model referred to profit-centric configuration of organizational elements. They emphasized that business design had to specify these four elements: customer selection, value capture, strategic control, and scope (Slywotzky & Morrison, 1997, pp.10-11).

The customer selection describes the company's chosen customer set. They implicitly assumed that a company did not define their profitable customers, and sometimes it might be true. Even though, there were few companies which positively define that who would be their profitable customers. Or, it can be said, there are still rooms to improve the profitable customer definition technique. The value capture describes how the company gets rewarded for the value it creates for its customers. This becomes a way to create new, or additional, profit sources. Today, manufacturing companies can employ a more extensive repertoire of value capture mechanisms than they ever had before: financing, ancillary products, solutions, downstream participation in the value chain, value sharing, and licensing and so on. All these methods will become one of the cues of servitization. The strategic control refers to the company's ability to protect its profit stream. It answers the questions: "Why should a customer buy from our company? Why must a customer buy from our company?". Strength of this element becomes a critical in successful business model innovation. And the last, the scope of a business model refers to the company's activities and its product and service offerings. Here, scope means (numbers of) company's activities, or traditionally, this has been said "make or buy" decision.

Slywotzky & Morrison (1997) told us that there were several ways to organize profitable methods by above four elements, but their models was established by current business model analysis, namely, these models seems like to encourage any business models can be profitable, even if the models were accompanied with their models.

This paper will, rather, suggest on the difficulties of transforming the business models, especially a manufacturing company to a service company. For above discussions, this can be learnt, that is, business model is not merely the configuration of organizational elements, rather, the continuous renovation of organizational elements to the selected profitable customers. Therefore, the discussion about business model must include articulated explanations why the company becomes profitable.

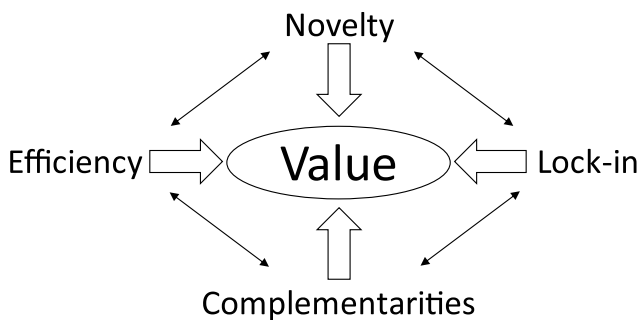
2.3. Conceptual framework of this study

Here, to show difficulties of organizational transformation, we will employ a dominant business model framework. It can show rigidity and inertia of the organizations. Zott & Amit (2009) emphasized that business model could be regarded as value generation system for customers. They conceptualized this delivery system as an activity system. Here, the activity system means a set of interdependent organizational activities centred on a focal firm, including those conducted by the focal

firm, its partners, vendors or customers. The firm’s activity system may transcend the focal firm and span its boundaries, but will remain firm-centric to enable the focal firm not only to create value with its partners, but also to appropriate a share of the value created itself. This conceptualization seems to ask us the unit of analysis, namely, shift from product and service selling to all over the linkages around the focal firm.

Based on this activity system perspective, they emphasized to design the business model. To design, here, means to assign the elements which are consisted of activity system. To some extent operationally, their model can be described by two sets of parameters that activity systems designers need to consider: design elements (content, structure and governance) that describe an activity system’s architecture, and design themes (novelty, efficiency, lock-in, and complementarities) that describe the sources of its value creation. Novelty involves introducing new elements related to activities, actors, and/or linkages. Efficiency builds interdependencies for lean operations, minimal costs, and/or low coordination costs. Lock-in refers to business models that emphasize retention of activities and actors. Complementarities involve the bundling of activities and/or linking of specific actors such that the system is bigger than the sum of its parts (Sorescu et al., p. 56). Their model can be abstracted in Figure 3 below.

Figure 3. Four design themes of business models



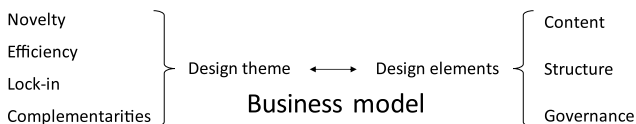
Novelty	New transaction structures, New transactional context, New participants
Efficiency	Search costs, Selection range, Symmetric information, Simplicity, Speed, Scale economies
Lock-in	Switching cost, Loyalty program, Dominant design, Trust, Customization, Positive network externalities
Complementarities	Between products and services for customers, Between on-line and off-line assets, Between technologies, Between activities

Source: Amit & Zott, 2001, p.504. Figure 1. Changed description in the table.

Figure 3 shows four types of values for customers. According to this framework, customer recognized four types of value from a specific business model. Most of

them are persuasive. Here, more important, though, they did not articulate relations between business model design themes and design elements, in Amit & Zott (2001), here we can suppose these relations (Figure 4).

Figure 4. Relations between design themes and design elements



Source: Authors.

Figure 4 suggests that rigid relations between design themes and design elements. This frame tells a certain design theme requires one related design elements. For example, efficiency design theme can be achieved when it realizes cost reduction (by scale of economies, speed, and rationalization and so on). Although Amit & Zott (2001) did not articulate what design elements were at that time, later their opinion was clear: orchestration (Zott & Amit, 2007, p.183). Here, orchestration means matching, namely, design elements work if design theme matches them. Thus, Zott & Amit (2010) conducted an empirical survey for business model performance.

However, their survey model focused on mainly design theme: efficiency and novelty, as independent variables. On the other hand, a dependent variable was a firm’s stock market valuation, but this indicator was measured by multiple measurements: profitability (ROI, ROA) at various time periods (annual average, average during Q4, and the last day of trading of Q4). As the result, design novelty significantly influenced firms’ performance in 1999, and design efficiency was also significant in 2000.

Their conclusion was important to business model research, generally, but these results were not important here. Rather, it is better to indicate that the model implicitly includes the orchestration assumption. Their empirical model apparently misguided their original model above Figure 1. Actually, they were getting preferred to focus on just design theme. In recent their works, they focused on elements of design themes which worked as each design theme. As the evidence, Zott et al. (2011) collected 1,253 business model related articles. Through an initial cursory analysis of 103 articles from above population, they summarized that business model, at least, has been used by three themes: e-business, value creation strategy, and innovation and technology management studies, respectively. In their summary, there is no discussion on design elements any more.

However, their basic model supposed that orchestration between design theme and design elements could achieve high performances. Here, our case will mainly be based on their original model. This article will describe Komatsu’s case as following this original model.

3. METHODOLOGY AND THE CASE

This section will discuss on research method and our case. Our study mainly focuses on showing new findings, or it can be said, it will not be orthodox understanding from dominant perspectives. Rather, it will be expected polemic and controversial. Because the case will show some difficulty of business model transition. Here, first the methodology shall discuss. Then, a company profile and the case will be introduced in next part.

3.1. Methodology

To show the purpose, we conducted a case study. Here, the case study means Yin's (1984) seminal work. According to his opinions, the case study would be appropriate under these conditions, such as theory building stage in which little data. In this article, rather, our case meets the criteria for an "extreme case", one in which the process of theoretical interest is more transparent than it would be in other cases (Eisenhardt, 1989).

Related to "extreme case", but if any, more important research purpose can be indicated. Our case must be a crucial case. The idea of crucial-case studies was introduced by Eckstein (1975). He argued positive contribution by a case study as a scientific research method. Additionally, the crucial "case that must closely fit a theory if one is to have confidence in the theory's validity, or, conversely, must not fit equally well any rule contrary to that proposed." (Eckstein, 1975, p118). The crucial case can be employed both for hypothesis testing and development of a hypothesis, even it is single case.

With regard to hypothesis testing, we can suggest democracy and economic development in China as the crucial case. Generally, according to the level of economic development, democracy is getting established. In this meaning, China is the crucial case for the theory of democracy establishment. In the same vein, India can be the crucial case for democracy theory against China. India maintained high level democracy, even it was still low economic development period. However, it is better to recognize that the crucial case does not work as hypothesis testing rigorously and precisely. Indeed, King et al. (1994) strongly criticized hypothesis testing by single case observation, as scientific meaning. Even it is the crucial case, that can be useful to modify the hypotheses, or to add some conditions to hypotheses.

Furthermore, we recognize that a case study, not only a crucial case, but also a case study in general, contributes to understand a mechanism of causal relations. Academic rigorously said, statistical test does not probe the causal relation itself, even hypothesis has been significantly tested. Compared to statistical causal relations, our natural judgements prefer to know what elements work and interact in such causal relations. For instance, when people read a detective novel (story), readers convinced the causal relations when detailed inference and reasoning processes by a detective are likely persuasive. In that case,

detailed each interaction among all elements in the story is more important than statistical causal relations.

3.2. The company profile

Komatsu Ltd. (hereafter Komatsu) was established in 1921 in Komatsu city, Ishikawa prefecture in Japan. It used to be a part of Takeuchi Kogyo (copper mining company), as developing a mining machine since 1917. During the Mukden Incident, around 1931, Komatsu received many orders to produce machine tools and mining equipment, utility machines, forest machines, and industrial machines. In 1931, Komatsu developed the original first tractor for agriculture. In 1943, Komatsu developed the first bulldozer archetype, and D50 in 1947. Accompanying with economic recovery in Japan after the World War II in 1945, Komatsu began to produce many varieties of machines: a motor grader in 1952, a forklift truck and dump car in 1953, a tractor shovel in 1956, a tire dozer in 1965, and an excavator in 1968.

Since 1967, Komatsu found the first subsidiaries in Belgium, then established a distribution centre in Germany in 1981, and constructed factories in the UK in 1985 and in Italy in 1995. Komatsu understood customer service in construction industry. Thus, Komatsu Europe International N.V. in Belgium to coordinate and expand Komatsu's operations on the European continent in 1989. As of March 2017, Komatsu achieved consolidated sales in worldwide for 1,802,900 million yen (EUR 12,878 million), return on sales is 174 billion yen (EUR 1.25 billion).

3.3. The Factors of Komatsu's Growth

As Bartlett (1985) described Komatsu's history as improving product quality challenges since 1960s to 1984. In 1960s, Komatsu launched a quality upgrading program in its factories. The program followed the total quality control concept. The objective of this program was to ensure the highest quality in every aspect of Komatsu's operations. In 1970s, Komatsu America was established to develop business in the North America market, but the product lines were still limited. Komatsu concentrated to sell crawler-tractors and crawler-loaders, and their prices were almost 30% to 40% below similar Caterpillar's equipment. Unlike Caterpillar, whose servicing dealer network covered the worldwide, Komatsu had no such sales and service network, namely, Komatsu focused on selling its products.

By 1976, Komatsu gained almost 60% market share of Japanese market. However, In the fall 1977, the Japanese yen began appreciating rapidly against most major currencies. For instance, the yen/dollar exchange rate went from 293 at the end of 1976 to 240 a year later, namely, USD1.00- to JPY293 to JPY240. Therefore, Komatsu accelerated its product development program. Between 1976 and 1980, the number of product models offered in the five basic categories (bulldozers, excavators, dump trucks, loaders, and graders) increased from 46 models to 77.

Komatsu experienced fluctuation of financial performances in 1980s. Thus, Komatsu strongly succeeded its product line wider. The decision to become a full-line manufacture, however, meant that Komatsu had to reevaluate its licensing relationships with technology suppliers. In exchange for help in obtaining essential know-how from Bucyrus-Erie and International Harvester for the manufacture of excavators and loaders, Komatsu signed agreements giving American licensors a tight grip over Komatsu’s exports of its products and a veto over the introduction of competing products in Japan.

In short, it can be summarized that Komatsu certainly grown through its high quality product with relatively low prices. That’s the typical strategy of Japanese companies during their growing stage since 1960 to 1990. Therefore, Komatsu would encounter some trouble against servitization process, in next section.

4. THE CASE

4.1. Before KOMTRAX

In 1990, under strong leadership of the then president, Tetuya Katada, Komatsu established the research centre, called Kenki Kenkyujo (construction equipment research and development centre). Missions of the research centre were to develop electric controlled construction equipment. Electric controlled equipment meant a kind of automated and remote control, typically, autonomous haulage vehicle and remote controlled power shovel, and so on. A predecessor model of KOMTRAX has been developed there in middle of 1990s.

Now, KOMTRAX (Komatsu Machine Tracking System) is famous for one of the earliest and the most successful IT innovations in construction equipment industry in the world. However, KOMTRAX is neither revolutionary technology, nor advanced scientific product. Rather, it is standard communication system based on wireless (even conventional cellphone) network system between any Komatsu’s construction equipment and its database. But, indeed it is true innovation ahead of ten years against competitors.

However, the original concept of KOMTRAX did not focus remote control, either autonomous haulage systems. Furthermore, according our interview with ICT division director Kazunori Kuromoto, he muttered that the original idea of this ICT system had not been understood even in the director board, no one could realize what this ICT system delivered a value for customers at that time.

4.2. Turning point of KOMTRAX

Before 2000, Komatsu struggled with economic recession in Japan, and unstable condition in China market. In 1998, Komatsu equipment sometimes was stolen in Japan, and used for crimes of robbery and burglary to ATM (Automated

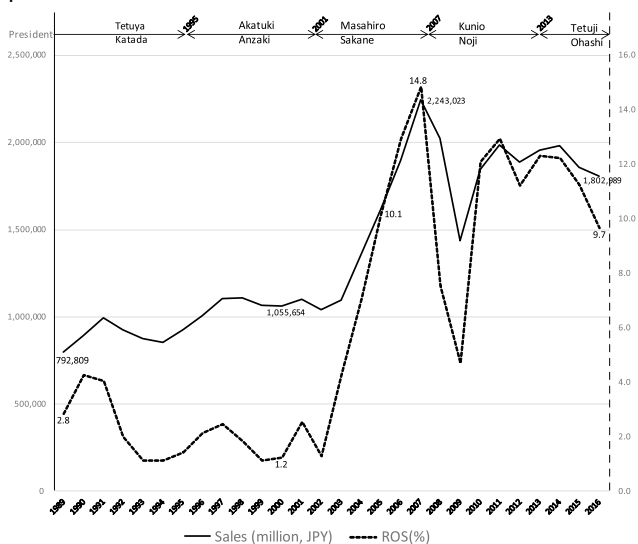
Teller Machine). The then chief in management planning, Masahiro Sakane asked some engineers what GPS informed us and worked against robbery and burglary. One of the answers was to know not only the location, but also additional information, for instance, operation usage of parts and components and devices in the equipment and machines. He intuitively knew the consequences of this GPS installation.

Early GPS was not built in, e.g. option. User might pay additional JPY200,000- to this installation. Even though, GPS effectively worked against robbery and burglary. GPS installation equipment locked its engine when the machine was moved 500 meter from the operation site. This protection has been received good reputation, specifically in China.

In 2001, Masahiro Sakane was appointed the president and he quickly decided that GPS should be default to all machines of Komatsu. Installation cost, at that time, was almost JPY200,000 for MSRP10,000,000 machine. That means that installation cost was approximately 2%. Mr. Sakane confessed that Komatsu operated that the decision was serious tough because Komatsu showed a huge loss, about 80 billion JPY around these days.

Mr. Sakane had a serious experience on maintenance and repair service when he used to be a manager of that department. For example, he often was flustered and confused when the customers asked to pick their equipment up from their operation sites. Because these sites were generally not on a map; rural and gorge area. The GPS would tremendous contributed to improve this miserable work. Thus, he had the confidence that customer value from the GPS should be worked not only for the customers, but also Komatsu’s servitization. This GPS turned into KOMTRAX. Figure 5 shows Komatsu’s performance both sales and return on sales (ROS), respectively, and duration of president appointments.

Figure 5. Financial performances of Komatsu and presidents



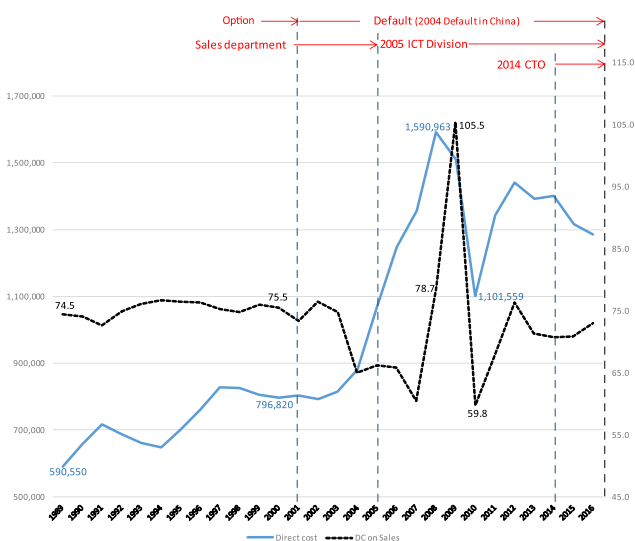
Source: Komatus Annual Report, each year.

4.3 Servitization Process of Komatsu

Figure 5 shows drastically improvement of Komatsu performance since 2001. With regard to sales, it grew almost double and ROS improve more than ten times. KOMTRAX seemed to be achieved huge success since 2001. Indeed, a part of this result should be true, but this was not servitization. First, KOMTRAX is the built in devices with some additional cost (price up). Still, Komatsu had not realized what KOMTRAX was for its business. The then president Sakane only convinced KOMTRAX should be worked, but communication was still limited because the cost around 2000 was not as cheap as nowadays. In these days, communication was used by 2G network of conventional cellphone.

Indeed, Komatsu’s machines have been sold as hardware by sales department by 2005. KOMTRAX was, at that time, used as sales tools. For example, information from KOMTRAX provided real operation duration of equipment and maintenance and repair moments to its customers. However, this is the point which divides into service or just sales tools. Because Japanese customers often asked such kinds of service for free, even to include in maintenance and repair service costs. Rare Japanese customers can agree with information from KOMTRAX as valuable. Consequently, Komatsu could not turn into servitization, but raise the prices of its equipment and machines. Servitization should be waited by Information and Communication Technology (ICT) division had been established in 2005. Figure 6 shows Komatsu’s improvement of direct production cost and its ratio on sales and organizational transitions. It is easily understood that direct production cost extremely increased since 2004, but both Figure 5 shows return on sales improved and Figure 6 shows ratio of direct cost to sales decreased, except in 2007 and 2008 for financial crisis.

Figure 6. Komatsu’s organizational transition and performance of direct production cost



Source: Komatsu Annual Report, each year.

4.4 Discussion

Since 2014, Komatsu appointed Chief Technology Officer and developed KomConnect for Smart Construction. Smart Construction is total construction management. That is servitization of Komatsu. KomConnect is a main software of Smart Construction, namely, it is cloud platform to achieve smart construction (seamless connection from location decision to operation managements). It took about 15 years since first KOMTRAX appeared.

Table 1 shows a trial framework to interpret this Komatsu servitization process. According to main discussion framework in Figure 4, this article assumed that matching (orchestration) should be required to good (high performance) business model. Table 1 shows business model transition in Komatsu. First, original KOMTRAX played novelty service under the specific design elements: content as option, added product attractiveness as structure, and sales department government. Then, in servitization process, KOMTRAX is getting changing data processing service as content, under service structure, and ICT division government. Critical opinion against dominant business model discussion is the difficulty and ambiguousness to such transition. This Komatsu case must be the crucial case against such dominant servitization process studies.

Table 1. Business model transition

Design theme	Design elements		
	Mean	Std. dev.	Male
Novelty: Original KOMTRAX	Option	Product attractiveness	Sales department
Efficiency			
Lock-in: Current KOMTRAX	Data processing	Service	ICT division
Complementarities			

Source: Authors

5. CONCLUSION

The purpose of this paper was to show difficulty both transition process and recognition in the organization of servitization in a traditional manufacturing company. Using an example of Japanese company, this paper provided a crucial case which asked to re-evaluate the dominant servitization discussions and frameworks.

For next research, we will suggest some theoretical framework for studying servitization process. First, we should ask why Komatsu did not KOMTRAX as service per se from its beginning. This problem is related to legitimacy of the organization and industry. Legitimacy sometimes works as a driver, but often works as a restriction. In Japan,

it is general that people avoid to do a novel thing, namely trail. They strongly evaluate on avoiding failure than gaining success. In this case, legitimacy works as severe restriction. Furthermore, customer does it as well. To buy service, Japanese customers tend to ask including it in the product cost, namely, free delivery and free shipping. To change these kinds of customs are incredibly difficult. Therefore, evaluation of legitimacy toughness should be a reach theme.

Second, we should ask why customer at last accepted KOMTRAX, even product price was raised. Of course, one clear answer is to know the real effectiveness (utility) of equipment operation hours. Additionally, KOMTRAX delivers all aspects information of the equipment and machines. Technological advance of KOMTRAX is ten years

ahead to competitors around 2001. However, such kind of advance can be easily disappeared under current global competition. In this case, important thing is inimitability. With regard to inimitability, technological advance is not enough. Rather, combining with service, or relationship with customers, must contribute to establish the inimitability. For KOMTRAX case, data accumulation and processing work as lock-in effect. Therefore, to estimate customer's evaluation functions becomes another research theme. Because customers sometimes hesitate to establish tight relationship with one specific supplier. Even though, effective service embedded in the product can solve these customer hesitations. After all, servitization process for a manufacture means to break legitimacy around the company, and to achieve inimitability through highly competitive products.

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LINKING SACRED PLACE PREFERENCES WITH PLACE MEANING: A CONCEPTUAL MODEL OF RELATIONSHIP BETWEEN SACRED PLACE MOTIVATIONS AND PLACE ATTACHMENT

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ABSTRACT

Sacred places are described as places of creation, devotion and power with a deep emotional meaning that attract people for many reasons. From the literature review, it is accepted that tourism motivation is multidimensional concept. Tourists seek to satisfy not one single need but a number of distinct needs simultaneously. People are attracted and emotional linked to sacred environments. Sacred places offer a range of psychological, spiritual and personal benefits providing potential affective link with tourists. Place-attachment influences what individuals see, think and feel about the place and therefore includes emotional and symbolic expressions. People develop a sense of belonging, identity, and dependence to certain places that visit or live and so place-attachment is a multidimensional construct that incorporates two dimensions that have recently been applied to tourism area: (1) Place-dependence that represents the functional dimension and is described as visitors' functional attachment to a particular place and their awareness of the uniqueness of a setting; (2) Place-identity which is the symbolic dimension and refers to the connection between a place and one's personal identity and contains both cognitive and affective elements. An extensive literature review focusing on the concept of place-attachment and motivations provide a framework which allows assess the emotional and functional bounds that tourists could have to sacred places. Insights from an empirical study of 300 tourists in Fátima (Portugal), Santiago de Compostela (Spain) and Jerusalem (Israel), indicate that the multi-dimension scale incorporates three motivations dimensions to visit sacred places as tourism destinations: Faith, Identity and Appealing. The focus of this article is to explore the relationship between these motivations with place-attachment, by summarizing, systemizing and discussing these distinct dimensions. The results could have potential practical implications for sacred destination' planning, marketing and management, promoting their own differentiating and unique features that attract tourists and involve emotionally tourists with these settings.

KEY WORDS: tourism, sacred places, motivations, place-attachment.

1. INTRODUCTION

Some places have powerful symbolic qualities with strong influence on tourism destination choice, such as sacred places.

People of many faiths, and also with no specific religion, visit sacred sites all over the world (Nyaupane, Timothy & Poudel, 2015). The World Tourism Organization (UNWTO, 2011) estimates that 330 million people travel annually to religious sites, making the sacred places a popular tourist attraction.

Sacred places are described as places of creation, devotion and power with a deep emotional meaning that attract people because they offer quiet space, a place to pray, someone to talk about or the opportunity to get information about faith (Shackley, 2005), in a sacred atmosphere and closeness to God (Eliade, 1981).

From the literature review, it is accepted that tourism motivation is multidimensional concept. Tourists seek to satisfy not one single need but a number of distinct needs simultaneously.

Places involve meanings and values that facilitate intimate relationships between people and spaces (Tuan, 1980), knowing as place-attachment.

Place-attachment influences what individuals see, think and feel about the place and therefore includes emotional and symbolic expressions. People develop a sense of belonging, identity, and dependence to certain places that visit or live and so place-attachment is a multidimensional construct that incorporates two dimensions that have recently been applied to tourism area: (1) Place-dependence that represents the functional dimension and is described as visitors' functional attachment to a particular place and their awareness of the uniqueness of a setting and (2) Place-identity which is the symbolic dimension and refers to the connection between a place and one's personal identity and contains both cognitive and affective elements.

Despite the importance to tourism literature and sacred destination management, the role of attachment to sacred places and spaces has largely been ignored, minimized or marginalized (Muzamdar & Muzamdar, 2004, p.385).

Place and place characteristics are significant in sacred destinations choice and sacred places attachment (Muzamdar & Muzamdar, 2004). Also, past research suggests that motivation is an important determinant of place-attachment, particularly in the domain of tourism (Kyle et al., 2004). Within this, and based on the insights from an empirical study of 300 tourists in Fátima (Portugal), Santiago de Compostela (Spain) and Jerusalem (Israel), about sacred motivations, the study aims to explore the possible relationship between these motivations with place-attachment, by summarizing, systemizing and discussing these distinct dimensions.

2. MOTIVATIONS

Motivations are the driven forces that lead the human behavior (Iso-Ahola 1982, 1999; Mayo & Jarvis, 1981). Are internal forces that directly encourage and guide individuals' behavior towards satisfaction and pleasure (Murray, 1964; Iso-Ahola, 1982).

In tourism research, motivation is generally considered as the main determinant of tourist behaviour (Hudson, 1999).

Tourism motivations are commonly defined as socio-psychological forces that predispose an individual to travel (Beard & Raghep 1983), and are considered the major significant forces in the destination choice process (Moutinho 1987). Motivation can also be a simple desire of individuals to participate in tourism activities. Participation in tourism experiences can result in a set of individual benefits, including personal satisfaction and development, harmony and social change (Wankle & Berger, 1991).

3. PLACE-ATTACHMENT

Place-attachment points to the connection and desire people have for particular places (Proshansky et al., 1983;

Feldman, 1990; Altman & Low, 1992; Relph, 1976) that individuals have lived in or experienced (Marcus, 1992; Rubinstein & Parmelee, 1992; Rowles, 1983; Mazumdar & Mazumdar, 1999).

The concept of place-attachment is defined as a positive concept (Moore, 2000; Manzo, 2003), assuming that one can be connected to a place is something good and that this psychological condition brings benefits to people and communities (Lewicka, 2005, 2008).

Place-attachment necessarily involves emotion (Stedman 2002; 2003b) and is a multidimensional construct that includes two dimensions that have been related with tourism: place-identity and place-dependence (Kyle, Graefe & Manning, 2005; Yuksel et al., 2010). Place-attachment includes a functional dimension – place-dependence – and an emotional or symbolic dimension – place-identity (Williams et al., 1992, 1995; Kyle et al., 2003, 2004a, 2004b; Moore & Scott, 2003).

3.1. Place-Identity

Place-identity is the cognitive and affective connection between the self and the setting (Proshansky, 1978).

This place-attachment dimension is used to characterize the role locations play in individuals' identification and in proving their affiliation with certain locations and add a deeper meaning to the quality of life and to the quality of the tourists' visit (Proshansky, 1978; Williams & Kaltenborn, 1999).

Place-identity is an important symbolic connection between a person and a place (Stedman, 2002). It is formed by a set of feelings associated with the physical particularities of a certain space (Proshansky, Fabian & Kaminoff, 1983). A tourist destination is a place with a set of appealing features for the tourist (Hu & Ritchie, 1993). However, the connection or bond with a destination needs to go beyond the location attributes, since it is also an entity that people will experience and with which they will identify (Lee, 2001).

3.2. Place-Dependence

Place-dependence is a kind of connection or bond with a certain space that is associated with the potential that this place has to satisfy the needs and goals of a person and with an assessment process that will show how that place, when compared to others, may satisfy the same set of needs and goals (Stokols & Shumaker, 1981).

Place-dependence forms when people show a functional need about the place that can't be transferred to any other place. This location may be important to an individual because of its functional value, that is to say, because of its capacity to create unique resources that will meet the expectations and experiences people were seeking (Stokols & Schumaker, 1981).

4. METHODOLOGY

A conceptual model is proposed based on an extensive literature review on motivations and place-attachment and insights from an empirical study of 300 tourists in Fátima (Portugal), Santiago de Compostela (Spain) and Jerusalem (Israel) about motivations to visit sacred places. These places are to consider sacred cities by many religions, sacred centers where concentrations of religious activities take place and centers of intense personal attachment and experiences.

The motivations variables considered for the survey instrument – the questionnaire – have been developed based on a literature review on motivation, religious tourism and sacred places. Since that motivation is a multidimensional concept and tourists seek to satisfy not one single need but a number of distinct needs simultaneously (Baloglu and Uysal, 1996). Sixty attributes were specifically used to assess tourists’ motivations to visit sacred places. A seven-point Likert-type scale was used as the response format for the motivation variables, with assigned values ranging from 1, “Not important at all” to 7, “Extremely important”. A pre-test sample of 50 tourists was used in order to refine the questionnaire and to test the reliability of the scales through Cronbach alpha (Cronbach, 1951).

The validation of the scale was achieved through exploratory factor analysis (EFA), aiming at determining the relationship between the observed variables and latent variables. Once defined the variables that represent each factor and the number of factors, a confirmatory factor analysis (CFA) was applied using full-information maximum likelihood (FIML) estimation procedures in LISREL (Jöreskog & Sörbom, 1993). In this sense, the

analysis and data processing were performed using the programs SPSS and LISREL.

On the other hand, the place-attachment variables considered pre-established dimensions and scales from the tourism literature review (22 studies) regarding with place-identity and place-dependence.

5. SACRED PLACES MOTIVATIONS

The motivations to visit sacred places can be varied and complex (Muzamdar & Muzamdar, 2004).

The SPMotiv scale (see table 1) that measure motivation factors driving the choice of sacred places as tourism destinations, indicate that the main travelling and demanding motivations of sacred places as tourism destinations are supplied with 1) Faith, 2) Identity and 3) Appealing.

Concerning with Faith motivations, tourists are driven to participating in ceremonies or religious activities, need for spiritual enrichment, believing the sacred and religious power of the site, strengthening faith, spirituality and personal beliefs, lighting candles or practicing other religious rituals, seeking spiritual comfort, to ask or supply the conception of something and to live a religious and spiritual experience.

Regarding to Identity motivations, tourists are motivated by identity search, personal development, knowledge, peacefulness and demand for a sense of life and self-learning.

With concern to Appealing motivations, tourists are guided by the sensation of calling and the need to make pilgrimages.

Table 1. The SPMotiv Scale – Constructs, scale items and reliabilities

Question: Indicate the importance of each item in travel to sacred places Answer: 7-point Likert scales from “1– Not important at all” to “7–Extremely important”.	
Faith	$\alpha=0.84; \rho_{vc(n)}=0.58; \rho=0.95$
V1 – To feel spiritually involved	
V2 – To feel emotionally involved	
V3 - To take part in religious ceremonies or activities	
V4 – Because of religious characteristics of the site	
V5 – To pray	
V6 – Because of the sacred mystic of the site	
V7 – To strengthen spiritual beliefs	
V8 – To light candles or practice other religious rituals	
V9 – To search for spiritual or religious comfort	
V10 – To beg or supplicate	
V11 – To meet a sacred icon	
V12 – To live a religious experience	
V13 – To live a spiritual experience	

Identity	$\alpha=0.79$; $\rho_{vc(n)}=0.56$; $\rho=0.86$
V14 - To have some peacefulness	
V15 - To search of identity and inner knowledge	
V16 - To find a meaning to personal life	
V17 - To learn about yourself	
V18 - Search for personal development	
Appealing	$\alpha=0.77$; $\rho_{vc(n)}=0.62$; $\rho=0.76$
V7 - Felt an urge to visit this site	
V8 - Pilgrimage	
α = Internal reliability (Cronbach, 1951) $\rho_{vc(n)}$ = Variance extracted (Fornell and Larcker 1981); ρ = Composite reliability (Bagozzi, 1980).	

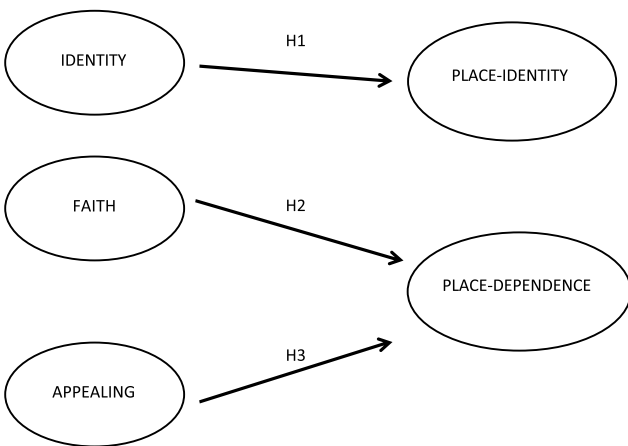
Source: Authors

6. CONCEPTUAL MODEL

The conceptual model proposed considers the three sacred motivations dimensions resulted from the empirical study and two dimensions of place-attachment reviewed on tourism and environment psychology literature.

The hypothesized conceptual model that is suggested is depicted in Fig. 1. This model recommends that each dimension of sacred places motivations will positively predict particular dimension of place attachment, resulting in the following three hypotheses.

Figure 1. Hypothesized Conceptual Model: Sacred Places: Motivations and Place-Attachment



Source: Authors

H1 – *The identity motivations positively influences the affective bond between the tourist and the sacred places*

Within tourism research spheres, identity-related questions such as ‘who am I?’ and ‘where I belong’ are becoming increasingly accepted as representing key underlying motivations of individuals seeking out religious tourism or sacred leisure experiences (Bond & Falk, 2013). On the other hand, for the believer, the place

itself can be an important part of identity formation (Muzamdar & Muzamdar, 2004). Thus, the identity motivations influence the emotional link that tourists feel about sacred places.

H2 – *The faith motivations positively influence the dependence bond between the tourist and the sacred places*

Sacred places offer a range of personal, psychological and spiritual benefits that make them attractive destinations and reinforce the link between tourists and sacred sites (Perriam, 2015).

Traveller to sacred sites is perceived as a quest motivated by faith (McGettigan & Griffin, 2012). Tourists are motivate by a desire to live a tangible sacred experience and connect personally with the sacred place visited (Metti, 2011), which requires involvement with the unique resources and sacred atmosphere of the place. Thus, The faith motivations positively influence the dependence bond between the tourist and the sacred places.

H3 – *The motivations of appealing positively influence the dependence bond between the tourist and the sacred places*

For believer tourists, visit sacred places evoke strong feelings of religious fervor (Nyaupane, Timothy & Poudel, 2015) and implies pilgrimage as a spiritual quest – a guiding force unifying divinity and humanity; a search for wholeness (Singh, 2006, p.221). These facts make stronger the dependence that tourists have with sacred spaces. So, the appealing motivations, such as an urge feeling to visit the site and the pilgrimage need, positively influence the dependence link between the tourist and the sacred places.

7. CONCLUSIONS

The presented study provides a conceptual framework that links sacred place preferences with sacred places meaning and attachment.

The tourist believer visits sacred places for individual reasons ranging from faith to identity and appealing.

Sacred places are places of prayer and veneration where rituals of faith are an important part of the tourist experience. Can be conceived also as places where Gods and spirits reside (Bowen, 2002) and where individuals are attracted to feel more closeness to them. On the other hand for the believer tourist, sacred places help in learning of identity and the self (Mazumdar & Mazumdar, 2004).

Human behavior is driven by the prospect of personal benefit (Kyle et al., 2004) and due the characteristics of sacred places, tourists tend to be involved and emotional connected with them.

The results could have potential practical implications for sacred destination' planning, marketing and management,

promoting their own differentiating and unique features that attract tourists and involve emotionally tourists with these settings.

The study intends to increase social, cultural and scientific knowledge of motivations and place-attachment to sacred places that allows a deeper understanding of sacred values associated with sacred places.

However, the model has limitations to be considered, eventually omitting and therefore not consider other significant dimensions of sacred motivations or place-attachment.

People create different relations to places, depending on their cultural values, interests, perceptions, individual experiences and living contexts, making them more or less attached to places. So, further research is also required to investigate how these constructs – motivations and place-attachment - are associated with other variables, such as tourists' past travel experience, lifestyle and/or destination image.

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MARKETING COMMUNICATION IN THE RIVER CRUISE INDUSTRY

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ABSTRACT

River cruising represents one of the fastest growing segments of tourism with a tendency of further accelerated growth. At the same time, in the midst of market competition growth, the contents, boats, organization, business philosophy and strategies of all involved in river cruises are gradually changing, and there is a need for use of the marketing concept as well as a thoughtful management of the marketing program. In recent years, riverboat operators have increased their marketing budgets multiple times, leading to increased exposure of their products to potential consumers, i.e. increased visibility of products and has indirectly influenced a sustained increase in river cruise sales. The aim of this paper is to examine and determine the basic characteristics of the marketing communications in the river cruise market that are communicated by the key holders and creators of river cruises, i.e. riverboat operators who use different media for transmission of their messages such as newspapers, radio and telephone as a traditional media and Internet as a new media that allows direct connection with consumers, creating interactions and relationships with them. For the purpose of collecting primary data, analysis of documentation method was used, including the analysis of websites of the largest riverboat operators. The contribution of the work will be expressed by identifying the key determinants of the application of marketing communications to achieve the business goals of riverboat operators in the conditions of strong market competition and challenging demand which is under the influence of new technologies, with a strong need for an adventure travel and a discovery of the new and the unknown.

KEY WORDS: cruise industry, river cruise, riverboat operators, marketing communication.

1. INTRODUCTION

In the conditions of an increasingly competitive market, there is a growing imperative for the use of marketing concept and marketing programme management of all stakeholders included in riverboat cruises business, particularly riverboat operators as one of key holders and creators of riverboat cruise offer. The marketing concept assumes that achieving the goals of an organization depends on identifying the needs and desires of the targeted markets and on delivering the desired satisfactions to more efficient and more effective ways than the competition does¹. Given that there has been a continued rapid growth in demand for river cruising in the last few years, among other issues, a question is posed as to which the key determinants of communication mix of riverboat operators are, in the conditions of very strong competition and heavy demand for acquiring unforgettable experiences?

2. RIVER CRUISING: KEY FEATURES AND TRENDS

River cruising is a “highly developed form of tourism, and the cruiser companies and crew provide all the comfort and entertainment aboard the cruiser during the voyage and organize excursions to elite and high quality destinations”.²

In comparison to maritime cruises, river cruises have certain specific qualities that arise from the features of the means of transport i.e. the ship, the characteristics of the voyage’s route, the amenities on board and the voyage program itself. The ships for river cruising are considerably smaller than the ships that are used for cruising on sea due to the limited depth of river flows, which significantly affects the ship’s offer, i.e. the facilities and other services offered to passengers on board for the purpose of rest, entertainment and fun during their voyage. The offer on river cruisers is poorer in volume and structure, the voyage

¹ Kotler, Ph., Bowen, J. T., Makens, J. C. (2010.) Marketing u ugostiteljstvu, hotelijerstvu i turizmu. Zagreb: MATE, pp. 30

² Gržetić, Z., Luković, T., Božić, K. (2013.) Nautical Tourism Market Suppliers in Continental Europe and Black Sea, in: T. Luković, (Ed.): Nautical Tourism (2013.) CABI, Oxford, pp.149

to predetermined destinations itself (ports, cities, natural sites and beauties) is more emphasized³ and passengers on river cruises can see attractive riverside sites (cities, national parks ...) from the comfort of the ship, which is particularly appealing to the older passengers who are the main market segment for river cruising.⁴

The supply of river cruises, i.e. the supply of boats' capacities, is mainly related to a particular river and its tributaries and it is widespread on all continents. In the river cruise market the main role is played by large companies, specialized riverboat operators (shipping companies) and tour operators.⁵ Back in the 1980s, most riverboat companies were small, family-run firms (some still are) but as consumers have become more demanding (due to having been 'weaned' on ocean cruises) larger, more efficiently run companies have appeared on the scene. The management teams that run them often have years of experience in the ocean-cruise industry and their expertise has transformed the rivercruise experience⁶

(for example companies such as *Viking River Cruise* and *AmaWaterways*). Currently, there are several major operators dominating the riverboat market (*Viking River Cruises*, *Avalon Waterways*, *Ama Waterways Uniworld*, *Grand Circle*, ...) and a number of smaller ones, which are struggling for survival and for which a gradual disappearance is being predicted in the future, i.e. merging with bigger operators.⁷

According to the Mintel research⁸, some of the leading companies in the European market are French *CroisiEurope*, German *Nicko Tours GmbH* and Russian *Vodohod*. In the United States of America (the USA) market, among the companies that have been organising cruises outside America, the leading roles belong to *Viking River Cruises* (currently the largest river cruise company in the world), *Avalon Waterways* and *Ama Waterways*, while the leading company that organises river cruises on the territory of North America is *American Cruise Line* (Table 1).

Table 1. Leading riverboat operators on European and American markets

Riverboat Operators	Headquarters	Riverboat Fleets (2017)	Cruise Offer By Region
CroisiEurope	Strasbourg	44	European rivers (the Danube, the Rhine, the Main, the Moselle, the Douro, the Guadalquivir, the Guadiana, the Po, the Elbe, the Volga.), French rivers (the Seine, the Garonne, the Loire, the Rhône, the Saône), the channels and the river Mekong (Vietnam and Cambodia)
Nicko Tours GmbH	Stuttgart	19 ⁹	European rivers (the Danube, the Rhine, the Rhône, the Saône, the Volga, the Neva, the Odra, the Elba, the Vlatava, the Seine), Asian rivers (the Yangtze, the Mekong, the Irrawaddy) and the Nile (Egypt)
Vodohod	Moscow	12	Russian waterways (the Volga, the Neva, the Moscow canal, the Svir river, The Sheksna, the Volga-Baltic Waterway)
Viking River Cruises	Los Angeles	59	European rivers (the Danube, the Rhine, the Main, the Elba, the Rhône, the Saône, the Seine, the Douro), Belgium and Dutch waterways, Russian rivers (the Volga, the Neva, the Svir), the Dnieper River, Asian rivers (the Yangtze, the Mekong, the Irrawaddy) and the Nile (Egypt)
Avalon Waterways	Littleton, Colorado	24	European rivers (the Danube, the Rhine, the Main, the Moselle, the Rhône, the Saône, the Seine), Asian rivers (the Mekong, the Irrawaddy) and the Amazon (Sout America)
Ama Waterways	Chatsworth, California	22	European rivers (the Rhône, the Seine, the Danube, the Main, the Rhine, the Moselle, the Douro, the Dordogne, the Garonne), Dutch and Belgium waterways, the Mekong (Asia), the river Chobe (Africa)
American Cruise Line	Guilford, Connecticut	10	North American rivers (the Mississippi, the Columbia, the Snake, the Hudson)

Source:Mintel, River Cruising - Travel & Tourism Analyst, no. 4, March, 2015, pg. 30-33; CroisiEurope, <http://www.croisiereurope.travel/en-gb>; Nicko Cruises, <https://www.nicko-cruises.de/en/>; Vodohod, <http://www.bestussiancruises.com/cruises/>; Viking River Cruise, <http://www.vikingrivercruises.com/>; Avalon Waterways, <http://www.avalonwaterways.com/>; Ama Waterways, <http://www.amawaterways.com/> (accessed 15.07.2017.)

³ Ban, I. (1998.) Krstarenje rijekama. Ekonomska misao i praksa, 7(2), pp.252

⁴ Goeldner, Ch. R., Brent Ritchie J.R. (2009.) Tourism: Principles, Practices, Phylosophies. Hoboken, New Jersey: John Wiley & Sons, Inc., pp. 147

⁵ Ban, I. (1998.) Krstarenje rijekama. Ekonomska misao i praksa, 7(2), pp.263

⁶ Mintel (2015.) River Cruising - Travel & Tourism Analyst, No. 4, March 2015, Mintel Group Ltd, London., pp. 30

⁷ Horak. S., Sever, I., Marušić, Z. (2013.) Međunarodna krstarenja Dunavom: Trendovi, faktori uspjeha i benchmark, Institut za turizam, Zagreb. pp. 14

⁸ Mintel (2015.) River Cruising - Travel & Tourism Analyst, No. 4, March 2015, Mintel Group Ltd, London.

⁹ Considering the fact that the ships of *Nicko Tours GmbH* are mostly in leasing, their nuber and their destinations vary every year

In line with the general trends in the tourist market that point to the transition towards the economy of experience and diversification of tourist products, in the supply of river cruises there is also a trend of improving the tourist travel experience in cooperation with a series of destinations on land. The river cruise market is currently mostly determined by the trend of looking for new destinations and new forms of vacation caused by tourist demand, which contributes to the development of the river cruise supply market in terms of increasing the number of boats, diversification of offer on boats (from big luxurious ships of capacity to 570 passengers to those smaller ones for 20 persons, and also traditional vessels characteristic for individual rivers), the growth of quality of amenities and services on boats, the expansion of cruising offers to new, lesser known rivers and the development of thematic cruises tailored to the special interests of tourists, which will enable them to acquire new experiences as well as combine cruises with other activities (e.g. cycling and trekking) in the destinations which are being passed through.

On the other hand, in the last few years there has been a continuous rapid growth in demand for river cruises, especially on European rivers. Demand for river cruises in the world and Europe, viewed individually by the countries of origin of passengers, is largely generated by Germany, and followed by passengers from the United States, Great Britain, France and Australia while passengers from other countries make a significantly smaller share.¹⁰ Also, there is a growing demand for adventurism on the voyages and for discovering new and unfamiliar. During the voyages tourists strive to experience new adventures and gain unforgettable experience, and in this context, the demand for thematic cruises tailored to the special interests of travellers will grow.

3. COMMUNICATION MIX OF RIVERBOAT OPERATORS

In recent years riverboat operators have repeatedly increased their budgets for marketing activities, which has led to increased exposure of their products to the potential consumers, i.e. to the increased visibility and to an indirect increase in sales of the river cruises. Generally, marketing communication represents "a process of transferring information, ideas and emotions from the sender to the recipient through media with the purpose of achieving certain effects".¹¹ Organizations use different media to convey their messages; from newspapers, radio, telephones as traditional media to the Internet as a new medium that allows business entities a direct connection with the consumers, thus creating interaction and relationships with them.

3.1. Research Methodology

The basic objective of the subject research is to investigate and identify the basic characteristics of marketing communication and advertising mix in the river cruise market communicated by riverboat operators, who are the key holders and the creators of the river cruise supply. For the purpose of collecting primary data, the method of analysis of documentation was used, including the analysis of website content of the largest cruiser companies. Also, a part of the primary data is an integral part of the author's primary research within the PhD thesis on Marketing of River Tourism conducted in the period from 1 July 2015 to 30 September 2015. The research was carried out on a sample of 5 cruiser companies which had the largest number of ships (a fleet) in 2017, i.e. on the following companies: *Viking River Cruise*, *Avalon Waterways*, *Ama Waterways* and *CroisiEurope*.

3.2. Results of research and discussion

3.2.1. Advertising of cruiser companies

Advertising is "a means to meet the market with the adequate goods and services and their properties,"¹² i.e. "any activity that informs consumers (buyers) about certain products and services with the help of visual, auditory and combined messages and influences them to freely choose and buy these products (or use the services) to start, increase or continue their sales, and to make the business as successful as possible."¹³

For the transmission of messages riverboat operators use various journals specialized in travel, newspapers, jumbo posters, radio and television, internet, social media and the like as an advertising media. Riverboat operators give special attention to the creation of brochures published in a printed edition as well as online on their web pages. The brochures actually represent a catalog of cruiser companies and they include information on the supply of all the itineraries offered by the company including the following: description of departure ports, ports of call, duration of cruise, cruises' departure dates, prices, ship data (ship and cabin categories), facilities offered on board, gastronomic offer on board, the description of planned activities for each day during the cruise, offers of optional trips outside the boat with a detailed description of destination and the trip's itinerary, booking and payment conditions, information on transfer to the port of call as well as additional advice for passengers and information on the protection of passengers during travel. In addition, in the brochures companies highlight the reasons why you should visit a particular destination, what special experiences tourists can experience on the travels organized by their companies, they highlight the specifics of their boats and itineraries and they represent cruises

¹⁰ Grammerstorf, H.H. (2013.) *European River Cruising*, The European River Cruise Association, Hamburg, http://www.ccr-zkr.org/files/documents/workshops/wrshp081013/6_HGrammerstorf_en.pdf (accessed 15.07.2017.)

¹¹ Kesić, T. (2006.) *Ponašanje potrošača*. Zagreb: Opinio d.o.o., pp. 434

¹² Rocco, F. (2000.) *Marketinško upravljanje*. Zagreb: Školska knjiga, pp. 209

as a “lifestyle” to a new “life experience”. The brochures are color-coded, with high-quality photographs showing the boat, different cabin categories and the layout of the boat (floor plans of each deck are shown), amenities on board, the gastronomic specialities that can be tasted in the boat’s restaurant and the destinations that can be visited as well as the atmosphere during cruise in general.

Big companies invest in TV advertising and they use the possibility to simultaneously address a large number of consumers on the desired market. For example, *Viking River Cruises* (www.vikingrivercruises.com) began advertising the river cruise line at PBS TV House, where it appeared as a sponsor of the *Masterpiece* series, whose portfolio include the award-winning *Sherlock* and *Downton Abbey* series with over 10 million viewers per week. Television viewers are Americans who are well-educated and who enjoy a higher household income than the average, and this advertising contributed to the popularity of river cruises on the US market where river cruises are a relatively new form of vacation.¹⁴ At the beginning and end of each TV show, Viking River Cruise ads appear in the form of informative video materials.¹⁵

In today’s overcrowded and expensive advertising space where consumers are bombarded with the most diverse advertising messages, a creative message of good quality is especially important, and it must be permanently designed, imaginative, entertaining and valuable to consumers to attract and retain their attention.¹⁶ In their advertisements all riverboat operators strive to highlight the benefits of cruising in relation to other forms of vacation, to point out the specifics of the boats, the itineraries and the unique experience of river cruise as an *all-inclusive*, “*carefree journey*” with the possibility of visiting various destinations without packing and unpacking luggage several times while on the trip (which is actually a subtle way of telling to older consumers, who are also the biggest demographic group, that river cruises are a comfortable way to travel).

In addition to slogans, companies use trademarks, product brands, distinctive styles of advertising, campaigns, and the like, i.e. advertising constants that appear in a series of advertising messages or form an integral part of a river cruise product. The names of leading riverboat operators are also product trademarks in the market and represent a guarantee for a certain level of quality of service. It is precisely with the trademark, defined as “any word, symbol or label, or their mutual combination”,¹⁷ that a riverboat operators try to identify their products and make them different from other similar products on the market

and point them out on their ships and work outfits of their staff on the ship. By advertising a riverboat operator introduces consumers to the new products, in particular new itineraries (destinations and rivers which they include in their offer), new ships and their key features, to the size and the name of a ship, to the new experiences they can gain while cruising and they strive to build a recognizable brand of products and differentiate it from the competitors.

3.2.2. Sales promotion activities

Riverboat operators direct sales promotional activities to travellers, travel agencies and their own sales staff. Examples of incentives to consumers are reflected in discounts for loyal guests, financial and other forms of awards, reduced prices (depending on booking time) and the like. On the other hand, there are examples of incentives directed at tourist agents such as increased commissions, training of agents and various bonuses or prizes for the number of sold cabins and the like. All agents who successfully complete the *Viking Travel Agent Academy* and apply for a Viking Visa card are eligible for a bonus for any booking made.¹⁸ Concerning their own employees, sales promotion measures mainly relate to enabling professional development of employees through periodical or continuous education and continuous motivation of staff.

3.2.3. Public Relations and Publicity

Public relations include “activities that are carried out by market participants in order to build and maintain good public relations”.¹⁹ The underlying task of public relations is to create a positive image of the desired subject and its activities and products, which directly promotes the improvement of the business. It is achieved by publicity which is actually an unpaid way of communicating with the public through various media, where the activity of a market subject or the product’s particularity is the subject of informing.²⁰ In 2014, CroisiEurope, in the spirit of “if you can’t beat ‘em, join ‘em” began to penetrate the North American market by hiring a public relations company based in the USA and a director of sales of river cruises exclusively for the Americans.²¹ Public relations firms strive to create a positive attitude towards the company, their policies and products, towards river cruises in general; they try to point out the advantages of such a form of vacation; they try to establish cooperation with the media and provide them with information on new ships, new itineraries and

¹³ Sudar, J., Keller, G. (1991.) Promocija. Zagreb: Informator, pp. 62 according to Ružić, D. (2009.) Marketing u turističkom ugostiteljstvu. Osijek: Ekonomski fakultet u Osijeku, pp. 287

¹⁴ Mintel (2015.) River Cruising - Travel & Tourism Analyst, No. 4, March 2015, Mintel Group Ltd, London., pp. 37

¹⁵ More on: <http://www.vikingrivercruises.com/video/masterpiece/index.html> (accessed 25.09.2015.)

¹⁶ Ružić, D. (2009.) Marketing u turističkom ugostiteljstvu. Osijek: Ekonomski fakultet u Osijeku, pp. 203

¹⁷ Vuković, B. (1973.) Turistička propaganda. Zagreb: Školska knjiga, pp. 50 prema Ružić, D. (2009.) Marketing u turističkom ugostiteljstvu. Osijek: Ekonomski fakultet u Osijeku, pp. 295

¹⁸ Viking River Cruise: <http://www.vikingrivercruises.com/special-offers/travel-agent-academy-rewards.html> (accessed 27.09.2015.)

¹⁹ Grbac, B. (2007.) Načela marketinga. Rijeka: Ekonomski fakultet Sveučilišta u Rijeci, pp.244

²⁰ Grbac, B. (2007.) Načela marketinga. Rijeka: Ekonomski fakultet Sveučilišta u Rijeci, pp. 231

destinations. For these activities, they mostly use press conferences and articles in various publications. In order to achieve a positive image and integrate into the life of a country / region through which river cruises are organized, companies often provide funding to educational, health, cultural and similar institutions. In this sense *AmaWaterways* sponsors an English language school in the *Ta Toum* village in Cambodia, which not only enables local children to learn English, but has also become the center of gathering of local communities of all ages. The company guides passengers on the Mekong River cruise on a school tour and they socialize with the children as well as with the local population.²²

By means of publicity events can be successfully presented and a positive image of them can be created. Editors regularly receive interesting news, and with the help of the media they inform about the construction of a new ship, its launch, about the godfather or godmother of the ship, who are usually celebrities from the *show business* and about the ceremony that is organized for that occasion.²³ For example, the *Viking River Cruise* has been intensively using sponsorship as one of the major public relations instruments. The latest sponsorship it has made is connected to the show *The Great British Baking Show*, which, besides the UK, has also appeared on PBS stations in the United States. Apart from the *Viking's* commercials appearing at the beginning of every show's broadcasting, *Viking* will use recipes and other content from the show and incorporate them into their products. Namely, Viking passengers are often interested in internal links between food and travel, making *The Great British Baking Show* particularly good for supporting the company's current brand, its image building and for improving position in the market. Also, *Marija Berry*, the show judge and one of the leading authors of numerous cookbooks, supports the company's activities and has become a godmother of a new ship- the *Viking Longship Alsvin*.²⁴

3.2.5. Marketing Communication on the Internet

Online technology, especially the possibilities that *Web 2.0* provides, enables business entities to engage in numerous marketing activities. The enhancements of marketing mix under the influence of online technologies are most noticeable in promotion and sales activities (e-promotion and e-distribution) that play a crucial role in e-marketing mix of tourist entities primarily because of the fact that the tourist supply and demand are physically remote from each other and with the efficient techniques of promotion via Internet they are trying to reduce this gap and visualise

the offer as much as possible. Most *web* sites basically represent a new promotional-communication medium of a company because these sites most frequently contain information about the company and its products. Given that many companies today realize a complete marketing program via the internet, from creating products and services, through pricing, to e-distribution and e-promotion, the website can be seen as the bearer of e-marketing activities in tourism. All riverboat operators have their own multifunctional web site with the following functions:²⁵

- a) promotion of a company and / or products / events,
- b) advertising of products / events,
- c) creating a corporate image,
- d) promotion of sales,
- e) contact with customers

Web pages of operators specialized in river cruising contain numerous information about the company (history, current events, prizes, future plans, river cruise industry in general), boats, cabins and amenities on boats with the possibility of a virtual boat tour, information on itineraries and the destinations that are visited, maps showing all the ports included in the itinerary and marked routes (specially marked routes for cruising and routes for travelling by plane, bus or train). They also contain photo galleries and videogalleries with travel clips and testimonies of satisfied passengers, brochures, information and advice for guests who have already booked a cruise, the possibility of online booking, electronic *check-in*, call centres and travel agents' contacts for booking and the like.

E-promotion is a "cross-functional process for planning, executing and analyzing of communication, and it is aimed at attracting, maintaining and multiplying the number of clients on the Internet."²⁶ The elements of the promotional mix on the internet are: advertising, sales promotion, public relations and direct marketing.²⁷ The advantages of internet advertising, above all, lies in the fact that it is much cheaper than ordinary advertising media (newspapers, magazines, television), and the content can easily be changed and refreshed as needed so that information is always up to date. Since the *web* space is unlimited, the possibility of multimedia presentation (audio and video) is opened and it makes the product more tangible. In this regard, riverboat operators offer virtual boat tours on their websites and an interactive cruise experience through numerous videos and cruise video clips that show the atmosphere both on board and in the destinations

²¹ Mintel (2015.) River Cruising - Travel & Tourism Analyst, No. 4, March 2015, Mintel Group Ltd, London., pp. 30

²² Ama Waterways, pp. 20, https://www.amawaterways.com/brochures/mekong/2015_2016_Mekong_LR.pdf (accessed 30.09.2015.)

²³ Peručić, D. (2013.) *Cruising – turizam, razvoj strategije i ključni nositelji*. Dubrovnik: Sveučilište Dubrovnik, Odjel za ekonomiju i poslovnu ekonomiju, pp. 125

²⁴ Viking River Cruise, <http://www.vikingcruises.com/press/press-releases/great-british-baking-show-sponsorship.html> (accessed 28.09.2015.)

²⁵ Ružić, D. Biloš, A., Turkalj, D. (2009.) *e-Marketing*, drugo izmijenjeno i prošireno izdanje. Osijek: Ekonomski fakultet u Osijeku, pp.192

²⁶ Ružić, D. Biloš, A., Turkalj, D. (2014.) *E-marketing*, treće izmijenjeno i prošireno izdanje. Osijek: Ekonomski fakultet u Osijeku, pp. 515

²⁷ Ružić, D. (2003.) *E-marketing*. Osijek: Ekonomski fakultet u Osijeku, pp.122

included in the itinerary. Through the company's web sites you can find all the information on the itineraries, the destinations that are visited, the detailed plan of all decks with their floor plan and photos of cabins (cabins' layout is also available on some web sites) as well as the amenities offered on board. Also, all riverboat operators have electronic brochures available on their web sites that contain all the cruise information that the companies offer and they offer to send a free newsletter to the email addresses of the existing and potential new customers. Furthermore, through the web sites, consumers can interact with the company at any time and from any

location. Passengers have the opportunity to ask questions, write comments and describe their travel experience with the company. There are online forms also available on the web sites which must be completed before the cruise departures as well as forms for online checking-in, thus accelerating the embarkation process on the ship.

Together with the existing website, more and more companies use social media to communicate with consumers on forums and blogs and they make profiles on social networks such as *Facebook*, *Twitter*, *Instagram*, *Youtube*, *Google+* and *Pinterest* (Table 2).

Table 2. Application of social networks by riverboat operators

Social networks	Viking River Cruise	Avalon Waterways	Ama Waterways	CroisiEurope
Facebook	+	+	+	+
Twitter	+		+	+
Instagram	+		+	+
Youtube	+	+	+	+
Pinterest	+	+		+
Google+	+		+	+
Blog		+		

Source: CroisiEurope, <http://www.croisieurope.travel/en-gb>; Viking River Cruise, <http://www.vikingrivercruises.com/>; Avalon Waterways, <http://www.avalonwaterways.com/>; Ama Waterways, <http://www.amawaterways.com/> (accessed 15.07.2017.)

Also, some companies use the benefits of mobile marketing, which enables them to communicate with their target group via any mobile device or network. All riverboat operators included in the research have web sites adapted for mobile phones and brochures which can be downloaded to mobile devices and which contain all the information on cruise offers and destinations that are visited.

4. CONCLUSION

Riverboat operators still use traditional media to a large extent, such as newspapers, specialized journals, radio and television for the purposes of promotional activities, which comes from the fact that currently the most represented demographic group at the age of 50+ that goes on river cruises is still fond of using traditional media. However, all cruiser companies also intensively use the advantages of marketing communication via the internet and they make

use of web sites as promotional-communication media, especially for a multimedia presentation of the offer, informing about the company, itineraries, ships, etc., but also for an after-sales communication with the passengers. Today, a large number of people are active on the Internet, especially in developed countries, which are the main tourist- generating market for river cruises and by using it as a marketing tool companies endeavour to expand to new markets, primarily the younger population and the families with children. New technologies enable business entities to connect directly with the consumers, creating interaction and relationships with them. Interactive internet applications enable marketers to establish a dialogue with consumers and they open the possibility of two-way communication with each consumer individually and the creation of tourist products and services to individual requirements of a consumer at relatively low costs and in this sense they are more intensively used by shipping companies for the purpose of strengthening their competitiveness and achieving better business results.

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ELECTROMOBILITY IN THE EUROPEAN UNION AND IN THE SLOVAKIA AND ITS DEVELOPMENT OPPORTUNITIES¹

UDK: 656.13(4.67 EU) ; 621.3(4-67 EU) / JEL: L94 ; Q55 / REVIEW PAPER

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ABSTRACT

The objective of the article is to analyze the current trends in the automotive industry on electromobility in the European Union and in the Slovakia. Partial goal is to identify potential uses of electric vehicles on those market. The article makes recommendations that would increase the marketability of electric vehicles in the Slovakia and gives focus on prospects of electromobility in the EU and in the Slovakia. Article contains information on benefits for the development of the Slovak economy in the event of electromobility development and SWOT analysis for its implementation.

KEY WORDS: electromobility, electric vehicles, automotive.

1. INTRODUCTION

Transport plays a macroeconomic perspective vital role in the economy of each country. It creates not only a lot of jobs for residents of the state itself, but also contributes to the GDP and provides economic growth of the internal market, which impacts on the living standards of citizens. The number of cars is growing constantly in the world, consumers demand is high, production costs are falling and this is reflected ultimately in price. Same trend has been increased care and in particular public interest in a healthy lifestyle in recent years. Traffic congestion is also increasing with growing number of cars and the boom of private transport and urban residents are in addition to emissions also exposed to excessive noise. More than half of population lives in cities precisely, while public transport is responsible for one quarter of CO₂ emissions from transport. We would not have to speak about emissions and about rapid increase in greenhouse gas emissions, if the majority of the industry, along with transportation are not dependent on oil supplies. Oil stocks are constantly open to debate and views are different from each other only slightly optimism or pessimism. However, the oil will be probably rarer in coming decades and its increasingly scarce resources are limited in both cases. Greater problem is a itself dependent on oil as its own reserves in the context of transportation. It was not so long ago, when there was a similar situation in our country and Slovakia

were weaned on natural gas supplies and relied on reserves. In the case of oil it would threat with economic security, accompanied by inflation, changes in the trade balance, competitiveness, etc.

Alleviate of this condition and achieve sustainable mobility require mainly the introduction of new technologies and innovations, as well as modernization of transport and infrastructure investment. Transport recently becoming greener, but due to its increased volume is slight changes and its current functioning is unsustainable in the long term. Further development of transport should be based on improving energy efficiency in vehicles, development and deployment of propulsion systems, and renewable fuels, more efficient use of transport modes and infrastructure. Problems in the field of transport is also aware of the European Commission, which responds to the unfavorable situation by issuing directives and measures binding on all member countries. Alternative fuels are extremely important in pursuit of the independence of European transport on fossil fuels and reducing greenhouse gas such as natural gas, biofuels, hydrogen. Given the fact that natural gas is already for a long time well established in the market and fuel cell cars will be launched first in 2015, we will dedicate to electromobility of third generations.

Aim of this article is analyze of current trends in the automotive industry for the use of alternative fuels with a focus on electromobility, identify possibilities of electric

¹ The paper is output of research project: VEGA 1/0380/17 – Ekonomická efektívnosť elektromobility v logistike“ (Economic efficiency of electromobility in logistics).

cars on the Slovak market and make recommendations that would increase the marketability of electric vehicles in EU as well as in the Slovakia.

2. ELECTROMOBILITY

2.1 E-Mobility in the European Union

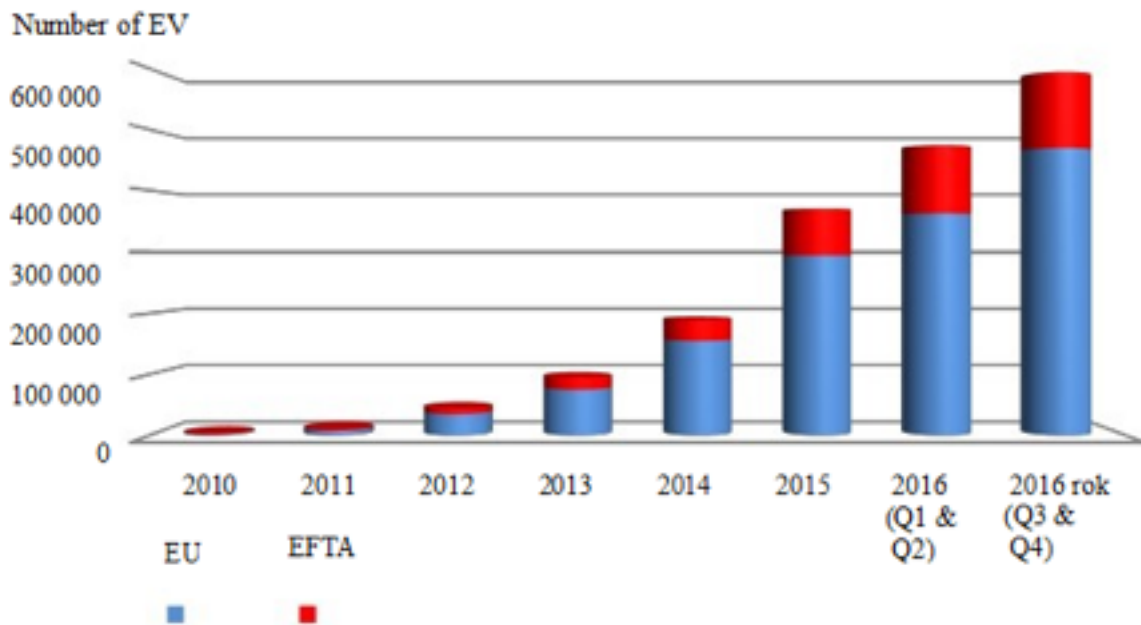
One of the most important markets for alternative fuels should be Europe for a few years. By 2030, according to the International Energy Agency (IEA), 20 million batteries should be sold in Europe.² According to a joint study by the Brussels Transport & Environment (T & E) NGO of Brussels and the European Automobile Manufacturers Association, ACEA made in 2016, 600,000 electric vehicles, including REEV and plug-in hybrids (PHEVs), are currently traveling

on European roads.³ In comparison with 2014, the number of electric vehicles has almost tripled.

The development of electromobility in Europe is supported mainly in Norway, Sweden, Denmark, the BENELUX countries, the UK, Germany, France, Italy. Owners of electric cars use the benefits in the countries mentioned as free parking in city centers or no taxes or tolls.

The interest in buying electric cars by consumers and legal entities is growing in Slovakia, but more slowly than in other EU countries. We have to realize that the success of electric cars depends on the sufficiently built-in charging infrastructure, the adequate vehicle's arrival and its acceptable acquisition price. The development of the growth of registered electric vehicles is presented in the following graph.

Figure 1. Number of registered electric vehicles (including REEV and PHEV) in Europe (in pieces)



Source: TRANSPORT & ENVIRONMENT. (2016). Electric vehicle sales in Europe. In Electric Vehicles in Europe 2016 - In-house analysis by T & E. Available on: <https://www.transportenvironment.org/sites/te/files/publications/TE%20EV%20Report%202016%20FINAL.pdf> (accessed 3.4.2017).

Europe has become the second largest market for electric vehicles after the United States and the number of electric cars sold surpassed Japan. Conventional (non-plug-in) hybrid electric vehicles have been available in Europe for almost two decades. Unfortunately, past sales numbers for these types of vehicle are not easily available from official EU statistics, as national authorities have generally categorised them simply as petrol or diesel vehicles. Of the other types of electric vehicles, BEVs were the first type widely marketed in the EU, although sales in early years were very low. In 2010, fewer than 700 BEVs were sold across the EU. PHEVs have been commercially available

since around 2011. Again, statistics for plug-in hybrid sales in those early years are uncertain, as many Member State authorities have categorised them as petrol, diesel or battery electric vehicles. From 2013 onwards, petrol and diesel plug-in hybrid models became significantly more popular as both the range of vehicle models available for consumers increased and more governments promoted various subsidies to encourage electric vehicle ownership. In that year, there were just over 49 000 electric vehicles sold in the EU, of which half were BEVs, and half PHEVs. The number of electric vehicles sold has increased steeply in each year since. The latest preliminary data for 2015

² OECD / IEA. (2016). Deployment scenarios for the stock of electric cars to 2030. In Global EV Outlook 2016 – Beyond one million electric cars. Available on: https://www.iea.org/publications/freepublications/publication/Global_EV_Outlook_2016.pdf (accessed 1.4.2017).

³ TRANSPORT & ENVIRONMENT. (2016). Electric vehicle sales in Europe. In Electric Vehicles in Europe 2016 – In-house analysis by Transport & Environment. Available on: <https://www.transportenvironment.org/sites/te/files/publications/TE%20EV%20Report%202016%20FINAL.pdf> (accessed 3.4.2017).

indicate that almost 150 000 new plug-in hybrid and battery electric vehicles were sold in the EU that year (EEA, 2016b; EAFO, 2016). Almost 40 % of these were BEVs. Collectively, just six Member States account for almost 90 % of all electric vehicle sales: the Netherlands, the United Kingdom, Germany, France, Sweden and Denmark. The largest numbers of BEV sales within the EU-28 were recorded in France (more than 17 650 vehicles), Germany (more than 12 350 vehicles) and the United Kingdom (more than 9 900 vehicles). The largest numbers of PHEV sales were recorded in the Netherlands (more than 41 000 vehicles) and the United Kingdom (more than 18 800 vehicles). In Latvia, Lithuania, Malta and Romania, fewer than 50 BEVs and PHEVs were sold in 2015. None were sold in Bulgaria and Cyprus.

French government provided subsidies for the purchase of an electric car with a value of EUR 5 000 in 2012. This financial amount increased by a further 2,000 after year, which ultimately reduces cost of electric car by 7 000, and left us to pay 13 700, to become the owner of a new car. Also remarkable is that in order to reduce the selling price to sell a vehicle with batteries, but the batteries would be rented through a contracted delivery cheap electricity. There are several tariffs in respect of the lease the battery,

but in cities the electric car is still worth it, because electric cars are exempt from congestion charges, parking or even road taxes. In the UK, customers have the opportunity to use allowance of 5,000 pounds.

The Netherlands has allocated in 2015 for the promotion of electromobility budget of EUR 9 million. These funds are used for the purpose of implementing the national action plan, ie. to stimulate electric mobility, strengthening international cooperation and creating partnerships, improving communication and science and research.

Nor other European countries are lagging in favoring electric vehicles. In Germany as the owner of an electric car is exempt from road tax for the first five years from the date of registration of the vehicle. Support of research plays an important role in this area. The result created from this platform was called Electromobility model regions 2009 – 2011. The Federal Government has allocated over these years to support electromobility around EUR 500 million and fair share of this budget stimulated just the supply side. It is expected to double that investment in the next period. The following table shows supporting tools electromobility in other European countries.

Figure 2. Summary of system tools support electromobility

Country	single		regular		Support for Business
	financial contribution	financial contribution	fee waiver / tax	nonfinancial	
Italy		5 000 €	✓	✓	
Spain	25 % of price (max.6 000 €)	63 45.32%			15 000 € resp. 30 000 € ⁴
Belgium	3 500 €	over 9 190 €	✓		depreciation 120 %
Denmark		over 2 000 €	✓	✓	
Sweden	4 500 € ⁵		✓		
Austria	to 4 000 € ⁶	✓	✓	✓	30-50 % from price
Estonia	to 18 000 € (on charger 1 000 €)				to 18 000 €

Source: IEA : Global EV Outlook : Understanding the Electric Vehicle Landscape to 2020. [online]. On internet:<http://www.iea.org/publications/globalevoutlook_2013.pdf>. (accessed 18.3.2017)

2.2 E-mobility in Slovakia

Slovakia has produced more than 1 mil. cars in 2015, which in comparison to the previous year is an increase of 5.8%. Slovakia has once again defended lead the world in the number of vehicles produced per capita based on record statistics for the past year (184 cars / 1,000 inhabitants). Although the presence of three automobile manufacturers built large logistics network, the tradition of the chemical

or electrical engineering would evoke huge prerequisite for a well functioning market electric vehicles in Slovakia. Currently, the electromobiles produced in Slovakia are the Volkswagen E-Up !, Volkswagen eGolf, Kia Soul EV, Citroën Berlingo Furgon Electric, Citroën C- Zero, Peugeot iOn and Peugeot Partner Electric. Competed on our market are brands of electric cars BMW i3, Nissan Leaf and Nissan e-NV200 Van/Kombi/Evalia. Opel brand, specific model Ampera was removed from market. It already has on offer

⁴ 15 000 € for vehicles cat.N2; 30 000 € for buses

⁵ Support is limited to the first 5,000 registered EVs

⁶ True if the electric charge using electricity generated from photovoltaic system

in the category of electric vehicles has yet to prepare news. Mercedes-Benz offers to sell its electric Mercedes-Benz B Class and Smart car. Purchase of the electric car can be realized only through the dealer Motor-Car Bratislava on special request. Without subsidies is e-car very expensive. Cause low sales of electric cars in Slovakia can also be their high cost. Cheapest begins transmitted at 24,500 euros, is a Volkswagen E-Up!. Identical model with internal combustion engine can motorist procure only a third of the price relative to the battery - from 8,350 euros. Operating expenses necessary to pass 100-kilometer distance of the electric car will go out to about 1.5 to 2 euros if you charge it from your home network. When combustion engine to 5-7 euros depending on the type and whether it is gasoline or diesel. Electric vehicles are driven, while the owner of half the price, the price of the car was significantly higher, e.g., in the case of the recently tested e-Golf to be more than a quarter. But the cost may come back even faster if you use the charger for free in shopping centers.⁷ Electric vehicles are on our roads is still a great rarity, in 2015 there were registered in Slovakia only 49. By comparison, the total number of cars registered last year reached almost 80 thousand. The main reason for the low sales of electric vehicles is their high price. Another reason is the state, which in our country is not considering, unlike other countries, the provision of support for their purchase. And finally, poor network of charging stations compared with service, even in comparison with other countries is very strong. In last year 2016 was changed the statement of state.

Starting from November 11 Slovaks can apply for state subsidies for the purchase of vehicles with electric or hybrid drive. The Ministry of Economy for this purpose allocated 5.2 million euros, with

the promise of improving awareness of alternative fuels. Confirmed: State gives the new electric or hybrid to 5 000 euros. Support package is available for both physical as well as for legal entities, towns and municipalities. The condition is that the vehicle has been allocated to the Slovak EVN. If the vehicle meets the conditions that any person who is mentioned in the registration certificate of the vehicle as the vehicle owner in the Slovak Republic may apply for the post.

While the grant is paid at once, but gradually. The conditions met by vehicles with purely electric cars or plug-in hybrids - that is, those that can be charged from an electrical outlet and the power used by electric motor combined with a conventional combustion engine. They must also fall into the category M1 (passenger cars), respectively N1 (small trucks to the total weight of 3.5 tonnes). Just such hybrid cars, although the offer manufacturers the most common, but the subsidy is not applicable. Just the possibility of charging from the mains is a key condition.

The subsidy amount is determined by fixed and not related to the total amount of the purchase price. When buying an electric state candidates offering five-strong support.

If a citizen thinks of plug-in hybrids, can count on the 3-thousand grant. Government grants are available from 11 November 2016 until the end of 2017, but only on condition that there is no depletion of the earlier allocations.

The package of subsidy is divided on three entries:

- 2000 EUR after registering their car and out the necessary formalities,
- 1500 euros in the next calendar month after the first anniversary of registration,
- 1500 euros in the next calendar month after the second anniversary of registration.

One person may use the grant to an unlimited number of vehicles. The condition remains once again that the budget for this purpose will not yet be exhausted.

Support will be bred electric and hybrid vehicles. Support will be bred and hybrid-electric vehicles. The subsidy can not be transferred to another person. If the vehicle is sold before 24 months after registration, the rest will be paid to the original owner. This does not apply if after the sale of the car will go abroad and thus loses Slovak register. The remaining part of the subsidy if forfeited already paid part of the original owner, however, remains. It also has the current measures against speculators. Just a government subsidy but this will change soon and also other manufacturers bring their modely. Now offer of thoroughbred electric are BMW, Citroen, Hyundai, Kia, Mercedes-Benz, Nissan, Smart, Volkswagen and win over customers fights and a lot of small producers of e-mobiles. The authorities also are thinking about other ways to support electric cars and hybrids. They talk about low-emission zones in cities, better parking options, or for the construction of charging stations. There are approval of the measure is to reduce the fee for the first entry of such vehicles in the registers. Its maximum height from 1 February 2017 shall not exceed 33€. State wants to support the construction of charging stations.

The first public charging station for electric vehicles in Slovakia was put into operation on Nov. 30, 2010 in Košice (VSE), followed the next year in Bratislava and Nitra Poprad. In Bratislava is also the first-ever quickcharging station (power up to 44 kW), which is accessible to the public in Petržalka (Einstein Street) at the gas station Slovnaft and operated by ZSE (ZSE). The second location for such a station, but not the public, the site is the exclusive distributor of Auto-Impex. The network spread quickcharger the third station in November 2013, and situated in the the city. There you will be able to charge electric car owners to charge their vehicles without any authorization or registration by the end of 2014, depending on the location and the appropriate strategic places (public car parks, shopping centers etc..) located on the territory of Slovakia and other charging stations at which charging requires several hours (power 3.7 kW / 22 kW). The practical aspects are the main initiators of various energy companies (ZSE, SSE, VSE, SE), which

⁷ TREND: Uvažujete o elektromobilite? Tieto (obmedzené) možnosti máte na Slovensku. [online]. On internet:<<http://www.etrend.sk/auto/uvazujete-o- elektromobile-tieto-obmedzene-moznosti-mate-na-slovensku.html>>. (accessed 16.1.2017).

are expected significant contribution and participation in the development of charging infrastructure, as well as the actual testing of electric or preparation of pilot projects.

In addition to energy companies, manufacturers of electric cars and service providers in this area would be the development of e-mobility in Slovakia, should significantly help the government and local governments. There is the concept of e-mobility under the auspices of the Ministry of Economy since 2011, which established in 2012 a working group on electromobility involving all major actors (governmental and non-governmental) in the field of electromobility to create Slovakia platform for e-mobility

modeled on Germany. The result of this collaboration was the development of an expert group key document entitled “Basis of the Strategy of development of electromobility in the Slovak Republic”, which was approved in May 2013 at the Ministry of Economy. Another goal after reaching this important step was the creation of a new concept in the form of analysis and recommendations stemming from the strategic documents, as well as draft policies to promote e-mobility in Slovakia. The outcome was a paper entitled “Strategy for the development of electric mobility and its impact on the national economy of the Slovak Republic”, part of which is presented in the following table.⁸

Figure 3. SWOT analysis of development of electromobility in Slovakia

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> strong position of the automotive industry in the national economy and the developed network of suppliers strong position electrotechnical industry in the national economy the availability of experts in technical fields, including IT relatively low labor costs compared to key markets for electromobility functioning platform and professional dialogue focused on the development of electromobility in Slovakia suitable energy mix 	<ul style="list-style-type: none"> low expenditure on research and development underdeveloped research base automotive industry in Slovakia lagging behind neighboring countries (AU, CZ), which began systematically to promote electromobility rather slower economy and increased focus on price often at the expense of quality harmonization of norms and standards lack of infrastructure for charging electric vehicles lower sensitivity of the adoption of environmental, respectively. innovative solutions 	<ul style="list-style-type: none"> reduce dependence on oil reduce emissions and pollution concentration transport locations creation of new skilled jobs developing research base in some areas related to electromobility impetus for innovative automotive companies and their suppliers creation of new innovative business models and services effective integration of mainly smaller, respectively local RES the use of electric vehicles in smart energy networks (SmartGrids) 	<ul style="list-style-type: none"> inefficient investments made for the development of electromobility lag in competitor countries, failure in stimulating investment and employment delay reduction in input prices due to slow implementation of economies of scale in mass production unsystematic ad hoc solutions

Source: PRACOVNÁ SKUPINA MHSR. 2013. *Návrh stratégie rozvoja elektromobility v Slovenskej republike a jej vplyv na národné hospodárstvo Slovenskej republiky*. [online]. On internet:<<https://it.justice.gov.sk/Default.aspx>>. (accessed 23.3.2014)

Slovak Association for electromobility (SEVA) was founded in 2012 in Bratislava in order to represent and promote the development of transport and transport infrastructure for passenger and commercial electric vehicles in Slovakia. The main motivating factor of representatives energy and electronics industries in establishing the association was the need of creating an effective platform for communication and cooperation between administrations, educational institutions, businesses and foreign partners. Also it participates in the preparation of essential documents, legislation and projects for the development of electromobility. The association has expanded the scope of its activities on the area of education and training in March 2014. In addition to research activities it is also aimed at providing consultation in the development of

training courses focusing on the practice of these focused on the issue of electromobility, organizing training events and presentations at high schools and colleges that offer internships and professional experience for students.⁹

GreenWay project focuses on environmental transport of goods through a complex system of infrastructure, logistics, technology and services. Its ultimate aim is to build an attractive and interesting business model in electromobility in Slovakia. Building a network of battery exchange stations allows to replace lengthy recharging by simply replacing the whole battery box car, while exchange stations is charging continuous in their ongoing. Given the range of services offered was founded a company called GreenWay Operator, which ensures the operation of the whole system.

⁸ MINISTERSTVO HOSPODÁRSTVA SR : Prvé rokovanie pracovnej skupiny pre elektromobilitu. [online]. On internet:<http://www.economy.gov.sk/aktuality-prve-rokovanie-pracovnej-skupiny-pre-elektromobilitu/10s139196c?set_subframe=blind>. (accessed 11.9.2017).

⁹ SEVA : O nás. [online]. On internet:<<http://www.seva.sk/sk/o-nas>>. (accessed 3.4.2017).

Green Way Operator includes:

- fleet of electric supply,
- the network of charging stations and battery exchange station,
- electricity for charging,
- information system for the management and operation of the system,
- service,
- operator service / call center.

Interested in the services GreenWay can choose between GW70-paid (70,000 km) or GW40 (40,000 km), the price of which receive electric vehicle charging infrastructure installation in the company, consumed energy, battery exchange stations, replacement vehicle, pay for insurance, taxes and fees, tire replacement and training of drivers.

Figure 4. Comparison of total costs for the fee GW70 and GW40



Source: GREENWAY: *Ako to funguje*. On internet: <<http://greenway.sk/sk/content/parallax>>. (accessed 3.4.2014). Explanation: column number 1 – total cost, right side - emissions saved CO₂ 10 290 kg; 1 143 trees.

The service is open to all companies that provide goods distribution through light commercial vehicles up to 3.5 tons or interested in “green technologies” and environmental protection. Special offer is designed for those who use electric cars far from discouraged by the high price.¹⁰

VIBRATE (Vienna Bratislava e-mobility) is the first cross-border pilot project to support electromobility in Europe, brought about by a consortium of Austrian and Slovak company in 2011. Its main aim was to implement a standardized charging infrastructure in the two countries and to establish a link between the neighboring metropolis of Vienna and Bratislava. The aim of this three-year project (January 2011 - December 2013) was also drawn to the functionality and use of electric vehicles in daily operation, which throughout the period tested a group of maybe 20 users primarily from the ranks of public institutions. Each project partner had to choose maybe 5 users ZSE (ZSE) has selected the following: City Bratislava, Bratislava Region, Municipality of Three-MoE SR MPaRV.

VIBRATE in numbers:

- the first Central European cross-border project to promote electromobility,
- Project Budget € 1,250,000,
- co-financing of 72% of public sources, primarily from CBC Programme Slovakia - Austria 2007-2013,
- 20 users of electric vehicles in the region,
- 9 charging stations in Bratislava, 4 of which are for the general public,
- 4 rýchlonabíjacie stations along the highway between Bratislava and Vienna, Bratislava 1.¹¹

Project partners representing Slovakia were ZSE and Energy Centre Bratislava. From the Austrian company Verbund parties participated Wien Energie and EVN.

There were formed 2 types of scenarios in connection with the development and future of electromobility in Slovakia formed under the Working Group MHSR: *standard and technology*. Order to develop scenarios based on certain

¹⁰ ELEKTROMOBILY.SK : GreenWay. On internet: <<http://elektromobily.sk/greenway>>. (accessed 11.9.2017).

¹¹ ZÁPADOSLOVENSÁ ENERGETIKA : VIBRATE – ekologické spojenie regiónu. On internet: <http://www.skupinazse.sk/documents/7607/VIBRATE_flyer_A-long_2012.pdf>. (Accessed 11.9.2017).

assumptions (development of oil prices, the price of batteries and electric vehicles, public perception, business environment, consumer behavior and public infrastructure) is to create a rough picture of the impact of electromobility development on the environment, assess the degree of dependence on fossil fuels, energy intensity assess whether the development of the necessary infrastructure.

- *Standard scenario* - slight Slovakia's interest in the development sector, conservative image of global

market developments (development of prices and demand for electric vehicles in Western Europe), 7 thousand electric cars for 2020.

- *Technological scenario* - a proactive approach in Slovakia (to become a leader in e-mobility in Central Europe), optimistic developments in global markets, in accordance with the relevant forecasts, 25-thousand electric cars for 2020.

Figure 5. Forecast of newly registered electric vehicles in Slovakia



Source: ZÁPADOSLOVENSKÁ ENERGETIKA : VIBRATE – ekologické spojenie regiónu.

On internet: <http://www.skupinazse.sk/documents/7607/VIBRATE_flyer_A-long_2012.pdf>. (Accessed 11.9.2017). Explanation : bottom line-Standard scenario; Technological scenario.

2.3. Proposals and recommendations

State intervention - because Slovakia is not a country like Norway, which has extensive reserves of oil and natural gas and results of operations where there is a surplus in the state treasury, it is necessary well consider in our conditions introducing specific measures for the development of e-mobility. It would be too naive expect from state direct subsidies for the purchase of an electric car, and therefore should be more focus on other supporting tools of indirect nature, without which the number of electric vehicles in Slovakia hardly grew. During the analysis of various documents and foreign studies, we came across on a number of measures that could help the current situation in the field of e-mobility, but this application requires a systematic approach. It is important to suggest a timetable for their introduction and temporal scope, because due to this sustainability can not be introduced all at once. It would be attractive for consumers remission of fees and charges associated with the operation of an electric vehicle (registration fee, road tax, tolls and tolls), the opportunity to recharge their electric vehicles for a discounted tariff for supply of electricity to park in designated areas for electric cars in the city center, as also use the lanes for public transport, which is not yet in Slovak towns too much, but their extension would certainly be worth considering municipal bodies to improve and thinking "ground" clearance and public transport. It would also still reserved for parking space for the owner of an electric car in his residence. From my own experience I can say that in some urban areas Bratislava without prepaid parking is almost impossible to find a parking space close to the apartment.

The use of dedicated lanes follows the introduction of visible signs electric car, which will give the vehicle owner feel special and by which it will be able to easily identify such. Owners of electric cars could also appreciate input into some areas closer to the center of the city, at least businesses to supply this service. City Bratislava has a plan to extend the time to enter some pedestrian zones since 4:00 arguing that electric vehicles are quiet. In such cases, the account also of the fact that in addition to the noise of the engine is noisy and the like handling and transshipment to supply this and the resulting effect can be minimized. E-mobility in Slovakia is located in a vicious circle, people do not buy electric vehicles, charging infrastructure is also in Slovak territory inadequate. Also, companies are not interested in building new charging station, until propagate the number of electric cars on the road. If state had not a clear vision in this area, support businesses and individuals, we would not have to lead these discussions. That is why it is important to consider the introduction of various tax breaks and incentives, co-financing, aid in finding financial resources, building permits for developers who think of e-mobility, procurement of electric vehicles into the ranks of police and firemen.

Support from car manufacturers and importers - automotive industry managers know that the future of transport belongs to alternative fuels. The production of electric cars is included in their programs. In decades, however, they have invested heavily in the development and production of internal combustion engines and their sales. The launch of the mass production of electric cars is therefore set aside. The electric vehicle is no longer

expensive due to battery, but mainly because of small-scale production. A combustion engine car is a state-of-the-art machine that can only be manufactured by technologically well-equipped and competent companies. On the other hand, simple electric vehicles can also produce smaller startups, which are not supported by the state. In such a case, the electric vehicle could help the merger of electric vehicle manufacturers as well as the outsourcing of R & D.

Support by groups supporting the development of electromobility - the support for the sale of electric vehicles on the Slovak market can also support the development of electric vehicles in Slovakia. In addition to electric mobility, drivers offer a comprehensive system of related services, such as the possibility of simple cross-system payment, flat-rate payment, vehicle charging management over time, a detailed overview of the functionality and availability of charging stations or customer support. Owners will also be thinking about the availability of the services provided before buying an electric vehicle in the future. The more flexible and comprehensive the portfolio of services will be offered to the driver, the sooner will deprive the customer of a feeling of uncertainty when deciding on the vehicle. It is also important to find the right balance between the services for which the customer is willing to pay.

Segmentation – we can argue under studied of secondary surveys that potential consumers and those interested in electric cars have emerged as modern humans, mostly to 34, interested in technology and its surroundings, open innovation and indicating trends. As Tesla Motors focuses on the premium segment, other car manufacturers should be targeted also to a specific segment based on actual surveys, particularly in Slovakia, where consumers are not favoring of direct financial subsidies from the government and the current bid price for electric ranges up to 30 000 EUR. Electric vehicle would be communicated as a vehicle whose possession reflects the image of the consumer and makes it exceptional in relation to the surroundings. Besides these characteristics, electric car owner looks like rational and educated consumer who is aware of the negative impact of industry and human activity on the environment, achieves success in work and daily raids around 20 km, ie. primarily used car for short distances within the city. Electric vehicle should therefore be exclusively presented as a vehicle for urban areas, which in comparison with conventional cars seems to be more practical and more economical. Its use nationwide traveling in Slovakia is only a matter of time and depends on the pace of infrastructure development.

Marketing communication - to be able to selling electric vehicles in Slovakia and in the EU, the potential owners have at least know their positive aspects. We have in mind the wider community also. Many people in electric vehicles imagine only a high price and short range. The aim should be to inform and educate the public as well as direction of advertising message to the target segment. Appropriate forms can be considered product placement, guerilla marketing, mobile marketing, internet marketing

and other less traditional forms that are somehow modern, imaginative and accepted by the target group.

Education - For education system are typical research and development activities in the field of electric vehicles. Probably the most famous project was the development of student electrical formulas, involving the Slovak Technical University in Bratislava and the company ZSE. As more practical benefit of the University we consider the design and development of special hybrid vehicles, while the R & D activities is no less than the University of Žilina University or Technical University of Kosice. If we consider a real expansion of electric vehicles in Slovakia and the EU in the future, we have experts in this field. It is necessary to establish cooperation at all levels, ie. we should involve all market EVs in education and forgive the outdated teaching methods. The results are not only worthy projects in student competitions. We must enable students to learn and learn about electro-accredited under the new program, elective courses or courses whose completion would guarantee success in the labor market. Courses opened by the carmakers or other commercial companies on campus seem as a supplementary education to students of the theoretical basis for their learning curve in business processes, where the company would train their future employees. This model need also the investmnet or cooperation from the side of state and public institutions.

Partnerships, leasing and service - cost of electric vehicles will be the biggest obstacle in Slovakia for which many consumers have not bought a vehicle. It is not possible since the long term to rely on an endless state support in the industry. Carrying high initial development costs for the customer is also unpromising. Carmakers have to consider creating global partnerships in technologies that allow them to achieve lower costs for the introduction of large-scale, as well as reduce overall risk. Electric vehicles current price could be reduced, for example, if the seller offered the most expensive components of the vehicle - battery - for leasing, or could be interested about electric vehicle designed repayment program. If carmakers want to gain new customers, they must provide certain guarantees to the consumer losing the sense of insecurity when he decides on the automobile. The battery life is one of the causes of doubt and hesitation. The battery should be warranted, during which there would be, if anything goes wrong the customer would be given a temporary replacement vehicle until the fault has been removed or replaced without charge the battery with a new one. Also, in order to avoid that the owner of an electric car remains on the road somewhere with the battery without recharging it from any source, vendor or other entity should establish a mobile assistance service, which would in an emergency recharge the electric vehicle. Other incentives could be less frequent checks and controls, free service and simple to install recharging equipment at the customer's home, enabling to comfortably recharge your electric car while you sleep and have it fully ready for each day.

3. CONCLUSION

The article allows us to understand the nature of e-mobility and deployment of electric vehicles in road traffic. The important elements are production of electric vehicles, charging net and infrastructure, information and communication technology and legislation. The electric mobility appears to be an alternative solution meeting the economic, ecological and social aspects of sustainability in view on the current traffic situation, which is characterized by strong growth performance and share emissions from transport.

Traffic problems are registered by European and other world countries that they have decided to implement national strategies to promote the development of e-mobility in the form of direct financial subsidies or through non-financial instruments, or a combination thereof. Funds spent in the electromobility sector should also ensure increased employment in the country while reducing dependence on fossil fuels. Not less important is the contribution of electric mobility and improve the environment by reducing CO₂ emissions, noise reduction or other adverse consequences for human health. Among the driving characteristics and specifications it should be emphasized efficiency of energy use, lower operating costs than conventional cars, the engine runs smoothly and energy recovery. The main disadvantages is discouragement of many potential consumers from buying an electric car, consider a limited range (up to 200 km on a single charge), battery life and recharging, the length of which depends on the type of charging station, and the high selling price.

Electromobility has currently the greatest opportunity to establish itself in the market, thanks to its great variety of international agreements and partnerships for the purpose of its development, as well as increased public interest in this topic for the last time. Mentioned national strategies help to the development of e-mobility, which not only motivate people when buying an electric car, but is also involved in the development of infrastructure. The leaders on a global scale in electro vehicles are countries like USA, Japan, the Netherlands, France, Norway, Germany and so on. We can when buying an electric vehicle to meet with government support in the form of direct financial contributions or tax credits that may in the Nordic countries such as Norway reach up to the amount of the value of a new car. Semantically equivalent are also public investment in science and research in the field of e-mobility and individual support to local governments. We have also taking into account other measures in force in foreign countries as free charging, parking in the city center, the possibility of using marked lanes for public transport, forgiveness toll, the electric vehicle becomes in the eyes of consumers attractive means of transport. The benefits can outweigh the negative aspects.

One part of this article is the view on the current situation in Slovakia, on the road which can be very rarely see the electric car, despite the fact that the country has excellent conditions for the development of electromobility. The perspective is the presence of 3 carmakers, sufficient

electricity infrastructure and long tradition in the chemical and electrical industries. One of the problems which hinder the development of e-mobility in Slovakia is lack of a network of charging stations (so far only in the cities of Bratislava, Nitra, Poprad, Košice). The exception is the capital city of Bratislava, where the current network of charging stations is sufficient for new potential owners of electric vehicles. Another challenge is the limited range. Nissan Leaf EVs is around 200km on a single charge. Linking the west and east is scarce. After charging stations come to the most serious problem and it is the selling price of an electric vehicle. It is moving around 30 000. While in some foreign countries, citizens have three times higher wages than people in Slovakia and the country still supports contributions from about 5,000 to 7,000 euro for buying an electric vehicle, the Slovak government supports e-mobility very passively, only on information - promotional way. So it will remain same in the near future, until the government does not accept and approves strategic documents submitted. The exception is the small amount of charging stations, which has the ability to recharge the car's battery charge. If we find a real candidate who is willing to pay the full amount for the electric car, the menu selection of electric vehicles is limited at some small urban vehicles. Subchapter proposals and recommendations is devoted the options how make attractive the electric vehicles in our conditions. It is necessary to focus on non-financial support programs, because direct financial subsidies are for us rather unreal as real. Other mission is create an attractive business model for entrepreneurs whose ideas of electromobility and the associated cost savings interesting rather than end consumers. It's the only way to develop electromobility in Slovakia to this times, while prices of batteries and electric vehicles doesn't decrease due to introduction of new technology and more efficient production.

The future of electric vehicles may be viewed as vehicles primarily intended to urban areas for short distances. Although the EU aims in urban transport by 2030, reduce the use of conventionally fueled cars in half, it is important to note that the role of electric vehicles is not fully replace cars with internal combustion engine and therefore comparison is sometimes not justified. Electric vehicles can be also extremely useful in meeting the objectives to be achieved by the introduction of urban logistics zero emission of CO₂ in the centers of large cities in 2030.

The article allows us to understand the nature of e-mobility and deployment of electric vehicles in road traffic in EU and in Slovakia. The important elements are production of electric vehicles, charging net and infrastructure, information and communication technology and legislation.

The electric mobility appears to be an alternative solution meeting the economic, ecological and social aspects of sustainability in view on the current traffic situation, which is characterized by strong growth performance and share emissions from transport. We have a new system of direct subsidies in Slovakia. Funds spent in the electromobility

sector should also ensure increased employment in the country while reducing dependence on fossil fuels. Not less important is the contribution of electric mobility and improve the environment by reducing CO₂ emissions, noise reduction or other adverse consequences for human health. Among the driving characteristics and specifications it should be emphasized efficiency of energy use, lower operating costs than conventional cars, the engine runs smoothly and energy recovery. The main disadvantages is discourage of many potential consumers from buying an electric car, consider a limited range (up to 200 km on a single charge), battery life and recharging, the length of which depends on the type of charging station, and the high selling price. Electromobility has currently the greatest opportunity to establish itself in the market, thanks to its great variety of international agreements and partnerships for the purpose of its development, as

well as increased public interest in this topic for the last time. We have also taking into account other measures in force in foreign countries as free charging, parking in the city center, the possibility of using marked lanes for public transport, forgiveness toll, the electric vehicle becomes in the eyes of consumers attractive means of transport. The benefits can outweigh the negative aspects. The future of electric vehicles may be viewed as vehicles primarily intended to urban areas for short distances. Although the EU aims in urban transport by 2030, reduce the use of conventionally fueled cars in half, it is important to note that the role of electric vehicles is not fully replace cars with internal combustion engine and therefore comparison is sometimes not justified. Electric vehicles can be also extremely useful in meeting the objectives to be achieved by the introduction of urban logistics zero emission of CO₂ in the centers of large cities in 2030.

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DOES SOCIAL MEDIA USAGE INFLUENCE YOUTH'S INTEREST IN POLITICS?

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ABSTRACT

The power and the influence of Internet and the emergence of new media has significantly changed the world together with people's habits, behavior and communication. Over the years, social media have spread in most aspects of people's lives, especially among young generations. The role of social media has been investigated in many areas and it has also become very popular in the area of politics. Socially desirable goal is to encourage and increase the level of political participation, especially among young people. Previous research has shown that one of the influential factors for political participation is interest in politics. The purpose of this research was to determine the role of social media in shaping young people's interest in politics and political issues. The survey was conducted using online questionnaire among young people between the ages of 15 to 29. Results have shown that using Facebook for political discussions has a significant positive influence on young people's interest in politics. Using Twitter, however, has shown not to have significant influence on political interest of young people.

KEY WORDS: political interest, internet, social media, youth.

1. INTRODUCTION

Political participation has historically been considered as a crucial element of democratic development. Some studies (e.g. Bakker and Vreese, 2011) show that youth participation in political activities in western countries is in decline. There is a serious academic concern about the low political participation among youth in many parts of developing and developed nations. What is specific about youth is that they are not stimulated by traditional media such as television, radio or newspaper. Their tendencies are directed toward new media – Internet and social networks. Social networks can easily be explained as “a group of Internet-based applications built on the ideological and technological foundations of Web 2.0 that allow creating and exchanging user-generated content” (Kaplan and Haenlein, 2010). Many researchers investigated the relationship between social networks and political participation (Boulianne, 2009; Vitak et al., 2011; Ahmad and Sheikh, 2013; Sandoval-Almazan, 2017; Li and Chan, 2017) proving their existing connection. However, the aim of this research is to investigate the relationship between social networks and political interest. Political interest has shown to have a positive effect on political participation (Brady et al., 1995; Levy et al., 2016) and the purpose of this research is to determine to what extent are young people interested in politics and does the usage of Facebook and Twitter for political discussion influence their political interest.

2. THEORETICAL FRAMEWORK

Relationship between social networks and politics was first researched in Bimber's 'contributions on the Internet impact in communication and interaction of citizens and politics' (Sandoval-Almazan (2017) according to Bimber and Copeland, 2013; Bimber, Stohl, and Flanagan, 2009; Bimber, 1998; Bimber, 1999). The importance and the influence of social networks in the context of politics was also proven by Stieglitz and Dang-Xuan (2013). They have concluded that in the last few years social media have become an important political communication channel that enables political institutions and voters to directly interact with each other. Therefore, political activities might gain more transparency and citizens might be more involved into political decision-making processes.

Internet use can also be seen in the context of political knowledge. Dalrymple and Scheufele (2007) following the work of Neuman (1981) explain how 'political knowledge presents a two-dimensional construct. First, differentiation is a person's ability to identify factual information such as names, issues, and events. Second, conceptual integration is a person's ability to take these smaller bits of information and string them together to create larger ideas and abstract terms.' A relationship between the use of online news sources and levels of integrated knowledge was tested in their research. They came to the conclusion

that online news media have positive effects on integrated knowledge gain, such as candidate likes and dislikes and candidate issue stance knowledge. Except above mentioned researches, the Internet and social networks in the context of political knowledge and participation were involved in the work of Dimitrova et al. (2014). Their research led to the results demonstrating that the use of digital media has only limited effects on political knowledge and political participation. Furthermore, they point out that in the level of political knowledge greater role plays political interest, prior political knowledge, and attention to politics in traditional media formats. These results are consistent with previous research about the influence of new media on political knowledge conducted by Groshek & Dimitrova (2011) and Kaufhold et al. (2010). Dimitrova et al. (2014) also highlight that '...the use of political party web sites and, in particular, social media showed both significant and positive effects on political participation.' If we take social networks into focus then it is especially important to mention that they come to the following findings: '...using social media for political purposes was one of the strongest predictors of participation while use of online news sites, as expected, did not increase participation.' The following is an example of a research in which the benefit of social networks (in this case Facebook and Twitter) has not been confirmed. Sandoval-Almazan (2017) has conducted research by following hashtags (#iamproletariat and #iam123) from political parties at the time of a political campaign on Facebook and Twitter. In his research he came to the conclusion that the activity on social networks (usage of social media tools in campaigns) of candidates in the elections has no relation whatsoever to the victory in the elections. In that particular case in Mexico, Peña Nieto won against the opinion of Twitter users and Facebook lack of activity (Sandoval-Almazan 2017). However, number of previous studies have shown opposite results (Boulianne, 2009; Dalrymple & Scheufele, 2007; Dimitrova et. al. 2014; Kiouis & Dimitrova, 2006). Effing (2011) also confirms the usefulness of using social networks in political campaigns stating that 'more activity on social networks means greater election participation.' When considering the use of Internet and social networks by politicians, Ward et al. (2003) recommend using the Internet due to cost reduction, better mobilization of supporters, encouraging electoral participation and equity participation.

Despite of some different results in the above mentioned researches, Shirky (2011) highlights the importance of social networks by stating that: '...social media have become coordinating tools for nearly all of the world's political movements, just as most of the world's authoritarian governments (and alarmingly, an increasing number of democratic ones) are trying to limit access to it.' Viewed from any context 'social media data in the form of user-generated content on blogs, microblogs, SNS, discussion forums, and multimedia sharing websites (e.g., YouTube) present many new opportunities and challenges to both producers and consumers of information' (Stieglitz and Dang-Xuan, 2013).

2.1. Facebook and Twitter in the context of politics

Nowadays, when there are many forms of social networks, two of them stand out - Facebook and Twitter. The use of these two platforms, in political sense, has exploded since 2008 Obama's presidential campaign (Sandoval-Almazan, 2017). Furthermore, social networks like Facebook and Twitter are increasingly used as a source of news (Pew, 2015), so the fact that 44 percent of Americans used social networks get information about presidential campaign in 2016 should not be surprising (Pew, 2016). The fact that television is still the most popular and the most commonly used media and that the growth of social network users is skyrocketing every day has led to the increased usage of dual- screening. Dual-screening can be explained as 'the bundle of practices that involve integrating, and switching across and between, live broadcast media and social media' (Vaccari et al., 2015) Chadwick et al. (2017) explain the possible impact of dual-screening in future: 'Dual-screening is potentially reshaping political agency and the effects might scale up to alter the structure of communication relating to a televised political debate and the broader election campaign.' Therefore, it is necessary to mention dual screening when it comes to social media and politics, precisely because the activity on social networks can be inspired by what is being watched, listened or read.

Facebook is far the most popular and most used social network. In 2015 there was one billion active daily users, and today Facebook can be proud of averagely 1.32 billion active users every day (data taken for June 2017) (Facebook official site, 2017). 1.23 billion people represents one sixth of the total world population and when only one type of social media (in this case Facebook) has so many active daily users, it is easy to conclude that the impact of social networks on people and their everyday lives really exists. Bode (2012) focused on political behaviour and found out that 'intensely engaging with one's Facebook community facilitates behaviours and activities that spur political participation of all kinds.' Furthermore, Conroy et al. (2012) showed that Facebook positively affects political engagement and they explain it with following: 'Facebook allows for the creation of online political groups that provide many of the benefits that we have known face-to-face groups to provide for decades, such as information, motivation for political action, and a forum for discussion and communicative exchanges.' Examining the link between political participation and Facebook, Tang and Lee (2013) found out that exposure to political information on Facebook has a positive effect on political participation.

Twitter is social microblogging network established in 2006. Short messages called "tweets" which are limited to 140 characters is what makes Twitter special (Sandoval-Alamaz, 2017). Data from March 2015 show that Twitter had more than 1.3 billion registered users. Moreover, data form July 2017 show that Twitter surprisingly had approximately 157 million daily active users (Smith, 2017). Twitter (especially in America) is widely used social network during political events and research on Twitter is more

recent than Facebook (Sandoval-Almaz, 2017). Lassen and Brown (2011) analyzed the use of Twitter among Congress members in the United States. Authors concluded that, in the House, Republicans are far more likely to use Twitter than Democrats are. Gainous and Wagner (2013) explored in the same direction. Kruikemeier (2014) has researched how political candidates use Twitter, and major conclusion is that Twitter has significant impact on preferential votes. But not everyone agrees, Sandoval-Almazan (2017) in accordance with that gives example: 'A controversial research was made by Tumasjan et al., (2011) when they revealed the positive impact of Twitter on elections, but was later on contradicted by another research (Gayo-Avello et al., 2011) studying congress election on the US in 2010.' Twitter is especially used in, already mentioned, dual screening when TV audiences use Twitter and tweeting for following, searching information or expressing their opinions about political events, candidates, debates or situations (and similar) during live shows (Sasseen et al., 2013; Verizon, 2012; Wohn and Na, 2011). Chadwick et al. (2017) explored Twitter usage during dual screening and concluded that frequency of access to Twitter is positively and significantly associated with the motivation to acquire information and share information and opinions, while frequency of access to other social media is positively and significantly associated with the desire to influence others.

In many studies related to political behavior, users of Facebook and Twitter are researched together. Hyun and Kim (2015) found out that political conversation via social media contributes to boosting political participation. Further, regarding political participation, Skoric and Zhu (2016) found that expressive uses of egocentric social media, including writing and commenting on blogs, Facebook, or Twitter, were not predictive of offline political participation during the elections. Abdulrauf et al. (2017) researched the behavior of young people in the context of social networks (Facebook and Twitter) and politics. Their research, conducted in Malaysia was primarily related to their youth. Authors came to the following conclusions: 'political knowledge moderated the relationship between access to political information on Facebook and Twitter and online political participation on Facebook and Twitter' and 'political knowledge moderated the relationship between political interest and online political participation on Facebook and Twitter.' Charles (2010) and Pattie et al. (2004) came to the same conclusion, but they also discovered how political knowledge did not moderate the relationship between policy satisfaction and online political participation on Facebook and Twitter. According to these researches, Vitak et al. (2011) claim that Facebook and YouTube are widely used for political knowledge and political engagement by youth.

2.2. Political interest among youth

Russo and Stattin (2017) note that 'political interest is a key for the survival and development of democracies.' Political interest can simply be explained as how much politics is attractive to someone (Dostie-Goulet, 2009). Same author further explains that 'a politically interested citizen will

give particular attention to one or many subjects linked to public space or collective concern, such as the environment, public policy, human rights, or an election, to name only a few.' Political interest among youth is important because it is one of the most consistent predictors of political participation (Levy et al. (2016). Ilišin V. (2003) explains that youth in contemporary society at the same time represent a great political potential and latent problematic part of the population whose political behavior is less predictable than other social groups. She also points out that youth in Europe and Croatia show below average participation in political institutions and processes. Furthermore, compared to the older people, they more often declare that they will not vote. In a research from 2013, Ilišin and Spajić-Vrkaš (2013), reveal that 10% of young people in Croatia have a great interest in politics and 54% say they have absolutely no interest in it. This indicates that political interest among youth needs to be increased because such low participation is a threat to the future of representative democracy. Kovačić and Vrbat (2014) agree with above mentioned and add that except youth's lack of interest in politics, ignorance of the same can be fatal to the democratic system too. Political interest does not differ only between young and old, it differs between men and women too. Bennet and Bennet (1989) came to the conclusion that men are being interested in politics, current affairs and government more than woman. This difference depends on several causes (including situational, structural, and sex-role socialization). Slightly opposite to it, Russo and Stattin (2017) found no gender differences in the effects of political interest on changes in autonomy, relatedness, and competence.

Dostie-Goulet (2009) in his study concludes that friends and parents about equally affect the development of political interest among youth while teachers have a lesser influence. Besides that, political interest increases when they move out from their parents' home. He also confirms positive impact of social networks on political interest, and as an example mentions Obama's president campaign from Lupia's and Philpot's (2005) paper. The research of Niemi and Hepburn (1995) on the other hand, states that political interest is increasing in high school. Furthermore, 'The wide availability of communication technologies nowadays such as social media has provided young people with more channels than ever to find out about, discuss and engage in politics' (Li and Chan, 2017). Lately, many researches have questioned the impact of the Internet on political participation among the younger population, a task motivated by the decrease in political interest and electoral participation among young people across mature democracies (Bakker and de Vreese, 2011). When social networks and political interest are viewed together, papers of Boulianne (2011) and Kim et al. (2013) should be mentioned. They come to a conclusion that social networks allow political disinterested users to 'uniquely experience politics through politically mobilizing action and messages by their peers and incidental expo-sure, which could help promote political interest' (Yamamoto et al., 2017). Kovačić and Vrbat (2014) warn that countries with a high degree of youth disinterest for politics, risk having politically illiterate youth and potentially incompetent managers in the future.

3. RESEARCH METHODOLOGY

3.1. Participants and procedure

The research is based on an online survey carried out in 2017 on a convenient sample of 220 young people between the ages of 15 and 29. The information obtained was analysed using the statistical software package SPSS version 21.0. Statistical techniques of univariate analysis (frequency distribution, central tendency measures) and multivariate analysis (reliability analysis, linear regression) were used. Table 1. shows sample description.

Table 1. Sample description

		N	%
Gender	Male	60	27.3
	Female	160	72.7
Education	No school	1	0.5
	Primary school	5	2.3
	High school	115	52.3
	Faculty	85	38.6
	Master's degree	12	5.5
	Doctorate	2	0.9
Place of residence	Village	22	10.1
	Town/city	195	89.9
Employment status	Student	176	80
	Unemployment	11	5
	Employment	33	15
Members of household	1	5	2.3
	2	16	7.3
	3	48	21.9
	4	77	35.2
	5	49	22.4
	>5	24	11
Monthly income of all members in household	<400€	12	5.5
	401-800€	44	20
	801-1200€	68	30.9
	1201-1600€	40	18.2
	>1600€	56	25.5
Religion	Catholic	174	79.1
	Atheist	16	7.3
	Agnostic	16	7.3
	Orthodox	3	1.4
	Muslim	4	1.8
	Other	7	3.2

Source: Authors

98.6% of the respondents said that they use social networks, and only 1.4% of them said that they do not use social networks. Most of the respondents use Facebook (98.6%) and Instagram (70.45%), then Google+ (21.81%), LinkedIn (16.36%) and least number of them uses Twitter (10.2%). Even though Twitter was least represented social network among respondents, the aim of the research was to examine the influence of two most popular and most suitable networks for political discussion. It is very unlikely for Instagram and LinkedIn to be considered suitable platforms for political discussion considering the fact that they have specific purposes (Instagram is a photo sharing application and LinkedIn is a business and employment oriented social networking service).

3.2. Variables and measurement

Measurement scales were created by authors or adapted from previous studies in this field. Facebook and Twitter usage for political discussion was adapted from Abdulrauf and Ishak (2017). These constructs measured to what extend ranging from never to very often (Likert-type scale from 1 to 5) participants use Facebook and Twitter for political discussion (post, share, tweet or comment posts about politics and like or follow politicians or political parties). Political interest was comprised of three statements adapted from the research of Banerjee and Chaudhuri (2016). All proposed constructs have adequate reliability (Table 2). According to Nunnally (1978) it is considered for Cronbach's alpha to be acceptable above the value of 0.7.

Table 2. Reliability analysis of the constructs

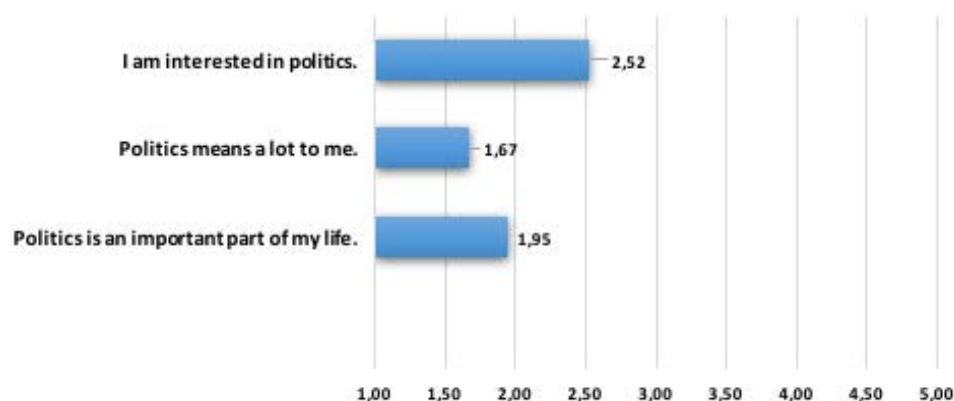
Measurement scale	Number of items	Mean	Variance	Standard deviation	Cronbach's Alpha
Facebook usage for political discussion	7	1.827	0.529	0.727	0.811
Twitter usage for political discussion	8	1.679	0.777	0.882	0.910
Political interest	3	2.045	1.226	1.10713	0.889

Source: Authors

4. RESEARCH RESULTS

The research results have confirmed the low level of political interest among youth. Chart 1. depicts the average scores of how interested young people are in politics on the scale from 1 to 5.

Chart 1. Young people's political interest



Source: Authors

Extremely low average scores confirm that young people do not take interest in politics. The lack of interest leads to political apathy and decreases the level of political participation. Therefore, it is necessary to explore influential factors on political interest in order to influence its increase.

The aim of this research was to determine does the usage of social media (specifically Facebook and Twitter) for

political discussion influence youth's interest in politics. To test this research question, linear regression was conducted. Political interest was the dependent variable, while the usage of Facebook and Twitter for political discussion were independent variables. Table 3. shows model summary. The proportion of explained variance as measured by R-Squared for the regression is 71,4%.

Table 3. Model summary

Model	R	r2	Adjusted r2	Std. Error of the estimate	Change Statistics				
					R square change	F change	Df1	Df2	Sig. F Change
1	0.845	0.714	0.680	0.71923	0.714	21.201	2	17	0.000

a. Predictors: (Constant), Facebook, Twitter
 b. Dependent Variable: Political interest

Source: Authors

ANOVA analysis showed that the model is statistically significant (p=0.000).

Table 4. Regression coefficients of the model

Model		Unstandardized coefficients		Standardized coefficients	t	Significance
		B	Std. Error	Beta		
1	(Constant)	-0.377	0.454		-0.830	0.418
	Facebook	1.042	0.251	0.642	4.154	0.001
	Twitter	0.428	0.218	0.303	1.959	0.067

Source: Authors

Table 4. depicts the results of linear regression analysis. As it can be seen, Facebook usage for political discussion shows to have a significant positive influence on political interest among youth (t=4.154; p=0.001; β=0.642). Using Twitter

for political discussion, however, has shown not to have the influence on political interest among youth (t=1.959; p=0.067; β=0.303).

5. CONCLUSION

The aim of the research was to establish whether using social networks for political discussion increases the level of political interest. The results have shown that using Facebook for political discussion has a significant positive influence on political interest. The more active young people are on Facebook in political discussion, the greater is their political interest. Twitter in this case did not have any significant influence on political interest but Twitter is not that widely used in Croatia as it is in some other countries so its effects cannot be generalized. The results of this research could be helpful for politicians and political parties in forming their political and marketing strategies. Facebook can be a very useful tool to reach young people and get them to be more involved in politics. It is necessary to encourage young people to be more active on social networks in political context and to develop their political interest because they are the ones who will shape the future of politics and thus the future of the entire country.

The research has some limitations. First limitation is related to the sample. The sample is convenient and was limited to a smaller geographic area. Another limitation related to the sample is the fact that 72.2% of the respondents are women. Regarding the usage of social networks, it is already mentioned that the results related to Twitter could not be generalized due to its low usage in Croatia. Further research in this area should focus on exploring other influential factors on political interest as well as the influential factors on online and offline political participation. Also, it would be interesting to explore if there are any differences regarding political interest among men and women or differences between some other sociodemographic factors (income, education, place of residence, etc.) Exploring and understanding the influence of certain factors on youth's political interest can help developing strategies aimed to increase their level of their political interest and thereby also to increase their level of political participation which is a socially desirable goal.

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SOCIO-ECONOMIC BARRIERS AND DEVELOPMENT OPPORTUNITIES OF ELECTROMOBILITY AS KEY TECHNOLOGICAL INNOVATION OF TRANSPORTATION

UDK: 656.13 ; 621.3 / JEL: L94 ; Q55 / PRELIMINARY COMMUNICATION

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ABSTRACT

Electromobility is currently the most dynamic and developing technological innovation in the field of the passenger and freight transportation. Key aspects of its dynamic development include especially the operational costs of electric vehicles and the ecologization of transportation by using electric-drive vehicles. For the above-mentioned key aspects, the more massive increase in the use of electromobility is recorded especially in the field of "city logistics". Our research activities are dedicated to identifying barriers and opportunities of sale promotion and using of electric vehicles by conventional transport users. Consumers consider many factors when buying a car, but in terms of the automotive market, purchasing power of the population and marketing support of electromobility in the Slovak Republic, the aspect of ecology of transportation and long-term cost efficiency are not the primary criteria for their decision-making process. We conducted primary quantitative pre-research by inquiry method via standardized online questionnaire that addressed some topics: (1) consumer interest in environmental protection; (2) consumer awareness and knowledge about electromobility; and (3) consumer buying behaviour in the context of electromobility development. Based on the results of consumer pre-research and analysis of legislative, economic and social conditions, the aim of this paper is to identify barriers and possibilities for development of electromobility and to suggest recommendations for the automotive industry (manufacturers and retailers of electric vehicles, associations of electromobility, companies providing electric vehicle services (charging stations), government institutions and the non-profit sector. The presented paper is output of the research project VEGA No. 1/0380/17 Economic efficiency of electromobility in logistics..

KEY WORDS: electromobility, electric vehicle, consumer awareness, city logistics, ecology.

1. INTRODUCTION

Electromobility is currently the most dynamic and developing technological innovation in the field of the passenger and freight transportation. The increasing costs of oil, global warming caused by greenhouse effect and environmental and air pollution especially in agglomerations have influenced the scientific research, governmental decisions and the markets in direction to electromobility development in order to reduce use of fuel and emissions. It results in increasing importance of electromobility.

Governments around the world are becoming aware that exclusive reliance on petroleum to power the rapidly

expanding transportation sector may become very costly in terms of financial, environmental and security impacts. Countries are becoming increasingly aware of the environmental and security implications of their present transportation systems and are looking at alternatives to petroleum, including biofuels, natural gas and electricity. European countries are looking at electric vehicles as the urban car of the future, ameliorating the problems of both conventional and unconventional air pollution (Lee & Lovellette, 2013). As more municipal governments across the globe set target dates for zero-emissions zones in large cities, electromobility will play a more important role in freight transportation (Crissey, 2017).

Furthermore, electromobility is emerging as a global alternative to transportation based on the internal

combustion engine. Battery technology is largely responsible for the recent success of electric vehicles from bicycles to passenger cars and buses. A sustained drop in lithium-ion battery costs and performance improvements are also fueling innovation in electromobility. At the same time, these changes are pushing the limits of design, and designers are looking for ways to maximize the value of lithium-ion energy storage systems (Osio, 2016).

Norway has become a global forerunner in the field of electromobility and the pure battery electric vehicles (BEVs) market share is far higher than in any other countries. One of the reasons is strong incentives for promoting purchase and ownership of BEVs. According to the research results of Bjerkan, Nørbech & Nordtømme (2016) dedicated to the role of incentives in promoting pure battery electric vehicles in Norway, purchase taxes are most critical factors. 84% of BEV owners in Norway consider value added tax and purchase tax exemption to be sufficient.

On the one hand, we can identify many incentives and activities of governments, car producers, non-profit sector that enable to develop electromobility, on the other hand we claim that the most important and main role at the electromobility market plays consumers as electric vehicle users. Although, there are books (Attias, 2016; Lienkamp, 2016; Figenbaum & Kolbenstvedt, 2013) and articles (Dumaine, 2016; Krzak, 2012; Martiny & Schwab, 2011; Shaheen & Chan, 2015; Altenburg, Bhasin & Fischer, 2012) dedicated to the electromobility opportunities and future scenarios, there is a lack of information focused on the consumer awareness, knowledge or attitude in the field of electromobility. Therefore we decided to conduct research focused on consumer interest, awareness, knowledge and their behaviour in the context of electromobility development. It is a preliminary work which is a basis for future deeper research in this field.

2. BARRIERS AND POSSIBILITIES OF ELECTROMOBILITY DEVELOPMENT IN SLOVAKIA

2.1. Methodology

Selection of scientific methods depends on the paper content focus and the paper aim. To elaborate theoretical knowledge we primarily used theoretical scientific methods, including a method of analysis and synthesis, a method of induction and deduction, abstraction and concretization, but also a comparative method. As a method of collecting primary data we conducted research. We evaluated and interpreted the obtained quantitative data through statistical and graphical methods in the Statgraphics software and MS Excel.

The basis for identification of barriers and opportunities for development of electromobility is represented by

the results of primary pre-research that we conducted by the inquiry method through the standardized online questionnaire in August 2017. We focused on three topics: (1) consumer interest in environmental protection; (2) consumer awareness and knowledge about electromobility; and (3) consumer buying behaviour in the context of electromobility development. However, this paper focuses on the analysis of partial results concerning the consumer attitude toward development of electromobility. The aim of this paper is to identify barriers and possibilities for development of electromobility and to suggest recommendations for the automotive industry (manufacturers and retailers of electric vehicles, associations of electromobility, companies providing electric vehicle services (charging stations), government institutions and the non-profit sector. We set the following research questions:

What are the most important barriers of mass implementation of electromobility in passenger transportation?

Which factors discourage consumers to buy an electric car?

What factors would convince consumers to buy an electric car?

The questionnaire consisted of 24 closed-ended and open-ended questions (including 5 classification questions). The respondent's answers were evaluated through frequency tables and cross tabulations, in some cases relevant descriptive statistics (e.g. average, standard deviation) were calculated.

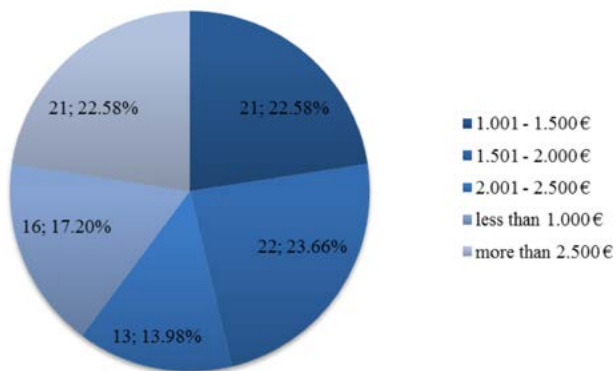
After testing for complexity, accuracy, validity, reliability and consistency, we analysed 93 questionnaires. We can consider our results to be representative. We calculated the sample size of 71 respondents with confidence level 95%, margin of error 7% and population proportion 0.9.

2.2. Results and Discussion

In this part of the paper, we present partial results of the pre-research which provide us with answers to the research questions and also testify to consumer attitude toward development of electromobility.

A total of 93 consumers participated in the pre-research, of which 48 (51.61%) were men and 45 (48.39%) women. In terms of age structure, there was the largest representation of consumers aged 26–35 (36, i.e. 38.71%) and 36–50-year-olds (28, i.e. 30.11%). 18–25-year-olds were represented by 23 consumers (i.e. 24.73%), and more than 51-year-olds by 6 consumers (i.e. 6.45%). In terms of net monthly household income (see figure 1), there were three levels of income with similar representation of consumers: 22 consumers (i.e. 23.66%) declared €1,501–2,000; 21 (22.58%) consumers declared €1,001–1,500 and the same amount of consumers (21, i.e. 22.58%) more than €2,500.

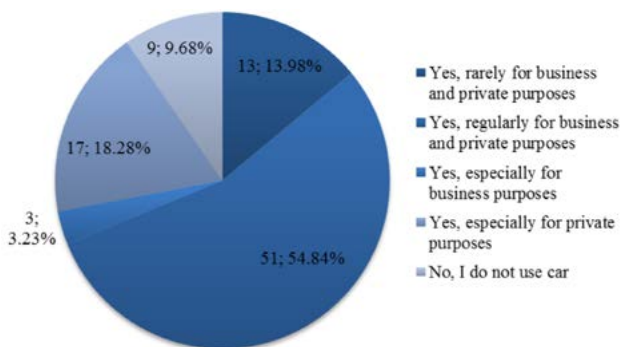
Figure 1. Net monthly household income of respondents



Source: own results

The research results (see figure 2) show us that 90% of consumers in Slovakia use car as a means of transport. Furthermore, a half of consumers (51, i.e. 54.84%) use the car for private and business purposes regularly.

Figure 2. Car as a means of transport

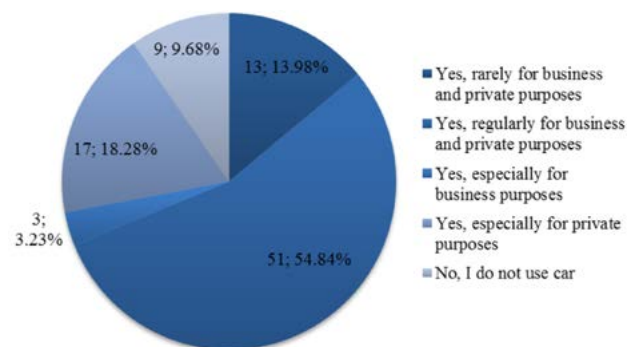


Source: own results

As results in Figure 2 show, a vast majority of consumers use the car, we focused on whether consumers know

someone who drives an electric car. We found out that only one third of consumers (29.03%) do know.

Figure 3. Do you know someone who drives an electric car?



Source: own results

Within the same part of the pre-research we focused on finding out factors that would convince consumers to buy an electric car. When evaluating the pre-research, points were assigned to each option (1 – Yes, certainly; 4 – No, certainly not, excluding the option I do not know) and based on setting the average values for certain factors we determined their order of importance from the consumers’ perspective. As shown in Table 1, we have found out that consumers consider price of a new electric car as the most important factor. Operational costs rank the 2nd place and state subsidy the 3rd place. We would like to point out recommendations of the relatives, friends, etc. and/or recommendations of sales representatives or advertisement do not play an important role for consumers when deciding to buy an electric car. The results also reveal that majority of consumers (62.37%) are not strictly focused on conventional cars. They do not prefer them. There is also a group of undecided consumers (30.11%) that do not know if they prefer conventional cars.

Table 1. What factors would convince you to buy an electric car?

Factor	1 - Yes, certainly	2 - Yes, maybe	I do not know	3 - No, probably not	4 - No, certainly not	Average	Rank
Price of a new electric car	57	20	4	12	0	1,49	1
	61.29%	21.51%	4.30%	12.90%	0.00%		
Operational costs (car maintenance costs)	50	33	4	6	0	1,51	2
	53.76%	35.48%	4.30%	6.45%	0.00%		
State subsidy (i. e. for the purchase of the new electric car)	43	35	5	8	2	1,65	3
	46.24%	37.63%	5.38%	8.60%	2.15%		
Car performance	30	45	5	13	0	1,81	4
	32.26%	48.39%	5.38%	13.98%	0.00%		

Positive previous experience with electric car, i. e. testing drive	24	46	12	9	2	1,86	5
	25.81%	49.46%	12.90%	9.68%	2.15%		
Professional articles, papers about electromobility	22	36	8	19	8	2,15	6
	23.66%	38.71%	8.60%	20.43%	8.60%		
Recommendations of relatives, friends, etc.	8	33	19	26	7	2,43	7
	8.60%	35.48%	20.43%	27.96%	7.53%		
Personal contact with sales representative and her/his recommendations	11	21	19	27	15	2,62	8
	11.83%	22.58%	20.43%	29.03%	16.13%		
Advertisement	1	16	15	40	21	3,04	9
	1.08%	17.20%	16.13%	43.01%	22.58%		
No matter what, I prefer conventional cars	6	1	28	28	30	3,26	10
	6.45%	1.08%	30.11%	30.11%	32.26%		

Source: own results

n=93

The data in the Table 3 dedicated to factors that discourages consumers to buy an electric car confirm the previous results. We found out that the price of an electric car is the most important factor. Consumers lack the charging infrastructure and consider driving range per one charging cycle to be short.

Table 3: Which factors discourage you to buy an electric car?

Factor	Average	Rank
High price of electric vehicles	1.72	1
Lack of charging stations	2.12	2
Short driving range per one charging cycle	2.31	3
Low level of technological advancement in the field of electromobility	3.09	4

Source: own results

n=93

In accordance with the aims of this paper we dedicated the pre-research to identify the barriers of electromobility development. We focused on consumer’s point of view. The research question “What are the barriers of the mass implementation of electromobility in the passenger transportation?” reveals what consumers consider barriers to the development of electromobility. We have to pay special attention to these factors, to remove them or improve them in order to support electromobility. As results in table 4 show, from the consumers’ point of view the most important barriers are (1) high price of electric cars, (2) economic and political interests of mining companies and producers of conventional fuels and (3) network of charging stations alongside road infrastructure.

Table 4. Barriers of the mass implementation of electromobility

Barrier	1 - Yes, certainly	2 - Yes, maybe	I do not know	3 - No, probably not	4 - No, certainly not	Average
High price of electric vehicles - cars	52	29	5	5	2	1.43
	55.91%	31.18%	5.38%	5.38%	2.15%	
Low power drive	8	19	20	31	15	2.14
	8.60%	20.43%	21.51%	33.33%	16.13%	
All-electric range of batteries, i.e. short driving range per one charging cycle, too	33	43	10	7	0	1.51
	35.48%	46.24%	10.75%	7.53%	0.00%	
Network of charging stations alongside road infrastructure	50	34	3	6	0	1.46
	53.76%	36.56%	3.23%	6.45%	0.00%	
Economic and political interests of mining companies and producers of conventional fuels (diesel, gasoline)	39	32	12	9	1	1.44
	41.94%	34.41%	12.90%	9.68%	1.08%	

Disinterest of consumers caused by their low awareness about electric vehicles	14	31	23	23	2	1.65
	15.05%	33.33%	24.73%	24.73%	2.15%	

Source: own results

n=93

New registrations of electric cars hit a new record in 2016, with over 750 thousand sales worldwide. Scenarios on electric car deployment seem to confirm the positive signals, indicating a good chance that the electric car stock will range between 9 million and 20 million by 2020 and between 40 million and 70 million by 2025. Therefore we were also interested whether the consumers consider buying an electric car in the future; what facts can influence their decision to buy an electric car in the future. Based on the results evaluation (see Table 4) we can conclude that for the vast majority of consumers (75.27%) the main problem relates to battery charging in their place of residence. At present the majority of population lives in flats with no possibility to charge the car battery at the parking lots. Moreover, consumers could express their opinion on other facts that should change their consumer decision making process. They were supposed to add the

claim “I would buy an electric car in the future if ...” We would like to pinpoint the claims with which more than one half of consumers agree:

- 62.37% of consumers agreed that charging infrastructure would be developed sufficiently,
- 58.06% of consumers would buy an electric car if the operational costs would be lower by 50% compared to the conventional cars,
- 55.91% of consumers prefer the battery life to be longer than 7 years,
- 54.84% of consumers expect state subsidy of 5.000 € at least for buying an electric car,
- 51.61% of consumers would buy an electric car if the price would be lower compared to the similar conventional car model.

Table 4. I would buy an electric car in the future if ...

Claim	Yes, certainly	Yes, probably	I do not know / It is not important	No, probably not	No, certainly not
the battery charging would last max. 30 minutes	54	27	7	4	1
	58.06%	29.03%	7.53%	4.30%	1.08%
operational costs of the electric car would be lower by 20% compared to the conventional cars	48	26	11	6	2
	51.61%	27.96%	11.83%	6.45%	2.15%
operational costs of the electric car would be lower by 50% compared to the conventional cars	52	26	11	4	0
	55.91%	27.96%	11.83%	4.30%	0.00%
price of the electric car would be lower compared to the similar conventional car model	40	32	18	3	0
	43.01%	34.41%	19.35%	3.23%	0.00%
the battery life would be longer than 7 years	27	34	13	16	3
	29.03%	36.56%	13.98%	17.20%	3.23%
the costs of battery changing would be lower	30	30	13	13	7
	32.26%	32.26%	13.98%	13.98%	7,53%
the range of the electric vehicle models of the specific manufacturer would be wider	24	24	30	10	5
	25.81%	25.81%	32.26%	10.75%	5.38%
the model of electric and conventional car would be the same	33	23	17	14	6
	35.48%	24.73%	18.28%	15.05%	6.45%
the bus lanes would serve for electric cars	16	43	15	11	8
	17.20%	46.24%	16.13%	11.83%	8.60%
there is free parking in the city	51	23	8	9	2
	54.84%	24.73%	8.60%	9.68%	2.15%
I would get at least 2.000 € as a state subsidy	58	28	5	1	1
	62.37%	30.11%	5.38%	1.08%	1.08%

I would get at least 5.000 € as a state subsidy	70	17	4	1	1
	75.27%	18.28%	4.30%	1.08%	1.08%
the network of charging station would be sufficiently developed	1	16	15	40	21
	1.08%	17.20%	16.13%	43.01%	22.58%
I would have no problem to charge the battery in my place of residence	6	1	28	28	30
	6.45%	1.08%	30.11%	30.11%	32.26%

Source: own results

n=93

2.3. Suggestions and Recommendations

Based on the pre-research results, we propose suggestions and recommendations designed to support the development of electromobility in Slovakia. While their processing we took into account the views and suggestions of consumers, but also the current state

of electromobility in Slovakia. Based on identified barriers and interested parties that are responsible for and influence the development of electromobility we divided our suggestions and recommendations into three categories (see table 5).

Table 5. Barriers and recommendations of electromobility development

Interested Party	Barriers	Recommendations
Automotive industry (manufacturer and retailers)	<ul style="list-style-type: none"> • High investments in production technology and development of electric vehicles • Stocks and production plans of conventional cars • Customer demand for conventional cars 	<ul style="list-style-type: none"> • To promote electric car models equally to car models with conventional drive • To provide service programmes and complementary services for electric cars • To offer completed information about electromobility and its advantages and benefits for customers • To inform customers about electric car models and conventional cars during purchasing equally
Charging stations	<ul style="list-style-type: none"> • Lack of charging stations network in the city districts, at the public parking lots and city parking zones, • Inadequate awareness on localization of charging stations alongside road infrastructure in Slovakia 	<ul style="list-style-type: none"> • To develop and to expand network of charging stations at the public parking lots in densely populated areas • To simplify system of payments for electricity in the way that the payments would be included in the bills/invoices for household electricity consumption (at present customers use special pre-paid cards) • To strengthen cooperation with electricity distribution providers in the field of education activities and benefits for households
Government institutions and non-profit sector	<ul style="list-style-type: none"> • Relate to recommendations • Harmonization process of legislation • Electromobility is not subject of strategic documents (Strategy of energetic safety of the Slovak Republic) 	<ul style="list-style-type: none"> • To provide benefits to the customers (discounts for electricity consumption, tax reduction, implementation of green taxes, permission to access downtowns) • To increase % of state subsidy for electric vehicle purchase • To raise awareness about electric vehicles and their global benefits, i.e. via public media • Communication campaigns dedicated to increasing consumer awareness

Source: own results

We pinpoint some facts concerning our recommendations:

- For automotive industry – over the last decades the automotive industry has invested considerable amount of financial sources in technological development. This fact can limit the car producers in diversification of their product portfolio to modern technologies, including the electromobility. The expected return on investments

does not enable transition to electromobility as dynamically as society would desire. Consumers' opinions may cause discrepancies between plans and possibilities of car producers and social demand for new technologies based on electromobility. Car producers which have recently decided to increase their investments in electromobility should also follow the trends at the consumer markets by adequate

presentation of the electric vehicle and conventional car models. Our pre-research results reveal that consumers expect to be more aware of electromobility even in points-of-sale, i.e. where supply meets demand for cars. The consumers perceive an electric car buying not only as a possibility to reduce operating costs but also as a social responsibility. This fact should be taken into account by car producers and dealers when promoting the benefits of electric vehicles. Precise and consumer-friendly information greatly encourages consumers to buy an electric car.

- The comfort of electric vehicle operation represents a key factor that consumers take into consideration when buying an electric car. We found out that consumers consider network of charging stations to be one of the most important barriers of the electromobility development. Charging stations in cooperation with electricity distribution providers are key players in the development of electromobility in Slovakia. The development of modern charging technologies (especially fast-charging stations) that guarantee higher comfort of the electric vehicle operation and the sophisticated payment options will greatly influence the electromobility market in Slovakia. In our opinion the potential benefit for consumers would be to create system of payments for electricity in the way that the payments for electric vehicle charging would be included in the bills/invoices for household electricity consumption.
- As there is no complex strategic document for the development of electromobility in Slovakia at the national level, there is no precise vision and scenarios of the Slovak electromobility market in the future. Government institutions should actively pursue a common dialogue with the key players of the electromobility market in order to create common platform for decision-making process and support of electromobility development. Table 5 includes the main recommendations for the public sector that are in compliance with the results of the socio-economic environment analysis and the conducted pre-research.

3. CONCLUSION

Based on the results of pre-research, the aim of this paper was to identify barriers and possibilities for development of electromobility and to suggest recommendations for the automotive industry (manufacturers and retailers of electric vehicles), associations of electromobility, companies providing electric vehicle services (charging stations), government institutions and the non-profit sector.

We conclude that 90% of consumers use car as a means of transport. The results also reveal that majority of consumers (62.37%) are not loyal to conventional cars at all. Only 7.53% consumers strictly prefer conventional

cars. These results can be understood as positive signal for future of electromobility. According to Lauko, CEO of Greenway Infrastructure, electromobility will be significantly expanded in our region around the year 2020, when the price of new electric vehicle should be lower than a conventional car. He also expects increasing number of electric car by the year 2020 caused by decreasing of battery price. The number of electric cars may be around 20 million compared to present 2 million worldwide and thousands, probably ten thousand of electric cars at Slovak market (TASR, 2017).

In terms of electromobility development we focused on identifying the factors that discourage consumers to buy electric car. Consumers consider high price of electric car, lack of charging stations and short driving range per one charging cycle to be the most important factors why they do not want to buy electric car. However, based on current trends and predictions, we know that these factors will be improved in expected manner. It means the electric cars will be cheaper, the charging infrastructure will be developed and driving range of an electric car will be longer.

On the one hand, we identified the most important barriers of mass implementation of electromobility in urban transport from the consumers' point of view as follow: (1) high price of electric cars, (2) economic and political interests of mining companies and producers of conventional fuels (diesel, gasoline); and (3) lack of charging stations. Only one third of consumers (33.33%) probably agree that their disinterest caused by low awareness about electric vehicles is the barrier to develop electromobility.

On the other hand, we have found out what would motivate consumers to buy electric car at present. As the lower price of electric car, lower operational costs of electric car and state subsidy would motivate consumers the most, we can claim that these motivation factors correspond to the above mentioned results. Furthermore, we focused also on the consumer attitude toward using and/or buying electric vehicle in the future. If we generalize the results, consumers will be willing to buy an electric car if the charging infrastructure will be developed sufficiently, the operational costs will be lower by 50% compared to the conventional cars, the battery life will be longer than 7 years, state subsidy for purchasing electric car will be at least 5.000 € and the price of electric car will be lower compared to the similar conventional car model.

Based on the pre-research results and identified barriers, we propose suggestions and recommendations that can support electromobility development in Slovakia. Based on the interested parties that are responsible or play the main role in electromobility development, we divided our suggestions into 3 categories: (1) suggestions for manufacturers and retailers; (2) suggestions for charging stations; and (3) recommendations for government institutions and non-profit sector.

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THE IMPACT OF VARIOUS INFORMATION SOURCES ON MOTHERS OF GENERATIONS X AND Y WHEN PURCHASING TOYS

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ABSTRACT

This paper looks at how belonging to different generations, namely the X and Y generations, is related to preferences regarding the various sources of information when purchasing toys. The base of the research were the psychological characteristics of both generations in general. Furthermore, the collected facts were used to confirm negative results. The sources of information were divided into the marketing dominant sources, such as advertising, sales promotion and the Internet, while the consumer dominant sources included children, family and friends. The paper uses exclusively the qualitative research method, with the in-depth interview as the chosen technique. The sample consists of twenty mothers in an equal ratio; ten mothers who are the members of the Generation X, and ten mothers from the Generation Y. All the mothers in the research have children younger than seven years of age, because of their relevant but not excessive impact on the mothers and their ability to make decisions when buying toys. The purpose of this method is to get into the core of the issue, and come to comprehensive answers that could be elaborated in more detail. Also, although the interview reminder exists, and it is listed at the very end of this paper, the interviews were conducted through engaging in casual conversation. The goal was to make the mothers more open and objective. The reminder was, therefore, used in cases when there was no specific subject was discussed. The survey obtained results showing a clear distinction between the members of these two generations, proving that it is important to know the mothers' age group to be able to use a quality approach. The X Generation mothers get the information they need via television, catalogs and by visiting the stores of their choice. We can say that they are the traditional group. However, the Y Generation mothers clearly prefer the Internet and their circle of friends as the source of information. The common variable for both generations are their children as the consumer dominant source of information.

KEY WORDS: The Generation X and Y, mothers as buyers, marketing directed to mothers, purchasing decisions, toys.

1. INTRODUCTION

Today, when there are so many different sources of information, it is important for every company to find out which source favours its customers, concerning their offered product. At this point, the children's toy market is worth more than \$84 billion (Statista, 2012), which is just another proof that there is a need for discovering the roots of this market's success. The following paper focused strictly on mothers, as the biggest and most important toys customer segment (Field Agent Toy Study, 2016) and explored how different sources of information affect Generation X and Y mothers. The aim of the presented paper was to prove, or to deny, the gap between these two generations when collecting information necessary for decision-making on buying toys.

Since several global researches are exploring similar topics, the aim is to carry out a research on the territory of the Republic of Croatia, based on the following combination of professional (Zeldis Reseach Associates, 2010, Goldman Sachs, 2015) and scientific papers (Andez G., 2013, Talafuse A., Brizek MG, 2012, Lupton D., 2016). Professional papers are devoted to mothers, their personal methods of gathering information, and preferences of different information sources concerning the types. Moreover, they explain some of the reasons why mothers, of both generations, use certain sources of information, and how they use them considering different generational affiliation. These papers provide a comparative image of mothers as customers who differ regarding their age.

Unlike professional papers, scientific papers do not data about mothers regarding generations, but study the process of making a decision when buying toys, and which sources of information they use during the decision-making process. Furthermore, these papers provide an overview of general sources of information for everyday situations in the mothers' lives. By combining the results of the observed researches, it comes to mind that mothers are the main customers of toys for children, as there is a difference between the mothers of generations X and Y as buyers, which points to the difference between the used sources of information about the products, used by both generations simultaneously.

Ultimately, this research is being carried out as previous researches, it was conducted on the territory of Republic of Croatia and it did not deal with the influence of the sources of information on Generation X and Y mothers when purchasing toys.

2. METHODOLOGY

For this paper's purpose, the market research was conducted on the territory of the City of Zagreb in the Republic of Croatia. In-depth interview was used as a part of the investigative research, and it was made on the sample of 20 mothers, through two phases. The first round of interviews took place in the month before Christmas, in order to find out which sources of information mothers used when thinking about toys and choosing them, and how clear the difference between the two generations of mothers really is. The second round of interviews was conducted a few days after Christmas, and here, the purpose was to know what changed with respect to the first interview, and which sources of information really had the dominant influence on the mothers of one and the other generation when buying toys. The interphase, between the first interview and Christmas, implied the monitoring of marketing activities of the leading toys makers on the market of the Republic of Croatia. The Christmas season was chosen as an occasion to conduct research, since it was the most appropriate time for buying toys (Christmas Retail Research, GfK, 2013). As a research instrument, a pre-developed interview guide was used.

In the previous years, a large number of researches were conducted on the theme of generation Y mothers and their comparison with generation X (Sachi & Sachi, 2015, The Goldman Sachs Group Inc., 2015). The Internet, as the dominant cause of the emergence of new generations, and its impact on young mothers, was the main cause these researches were conducted in the first place. Also, one more trend is emphasized, and that is the trend of the expanded use of social networks and blogs as a source of information where mothers often seek answers to their questions (BabyCenter 21st Century Mom 2015). This can be compared with the generation X mothers who are still more inclined to traditional sources of information, such as television and magazines.

The dominant method used in the aforementioned researches was mainly a survey, while on the contrary, this paper uses in-depth based interviews through two stages, where it is important to follow the sequence and links between the first and second phase of interviews. Also, the interviews were conducted on the same sample, making the use of any other research method limited.

To undertake an in-depth interview, a total of 20 mothers residing in the city of Zagreb were chosen, so it is a deliberate, appropriate customer sample. However, when selecting mothers, it was important to choose a relevant ratio of mothers according to their income, and most importantly, their age. Out of a total of 20 respondents, 10 are generation X members, where the youngest of them is 37, and the oldest is 45. The average age of the respondents of the generation X is 41 years. The Y generation respondents are on average 30 years old with the youngest being 24 and the oldest 34. The average monthly income of the mothers' households was considered as well, with the aim to notice a consistency or a gap between the income and the average monthly amount which the mothers are willing to spend on their children's toys. The respondents' income ranged between 1,000 and 2,500 euros per household, with 5 out of 20 respondents refusing to comment on the average monthly household income.

Another important variable when selecting the mothers was the number and age of the children, in order to show the relationship between the mothers concerning their age and their age-related children. The purpose was to find out how both groups of mothers are searching for information and from which sources, given the age of their children as influencers when choosing toys. Moreover, as children are one of the important sources of information, it is necessary to review their age as the influence on their mothers' changes as they are getting older. A total of 14 out of 20 mothers have two children, and the remaining six have one child. The youngest child is 5 months old and it is the child of a generation Y mother. The oldest child is 7 years old and it is the child of a generation X mother. The average duration of the interview was 45 minutes.

3. ANALYSIS OF THE MARKETING SOURCES OF INFORMATION FOR THE GENERATION X AND Y MOTHERS

The sources of information are just one of the chain loops in decision-making. This complex process is explained through the five stages which a consumer goes through when making a purchase decision. They are the following: recognition of needs and wants, information search, evaluation of information, purchasing process and post-purchase evaluation (Kesić, 2003). This work will essentially be devoted to the second phase of the model: seeking information, where different types of information sources will be analyzed, as well as their influence on a consumer's purchasing decision. In this case, this

specifically means that sources of information, at the stage when mothers are looking for information, directly influence their decision whether to buy toys for children or not. Considering the above stated, it is necessary to define the concept of seeking information, which can be clarified as a psychological or physical search for information in the decision-making process, with a desire to reach the set goal (Kesić, 2006). According to the Howard-Sheth model, the inputs involved in purchasing decision-making are the sources of information coming from the external environment, physical stimulus such as product quality, cost or product performance, then symbolic influencing factors through which visual and verbal information on a product is transmitted, whereas the last inputs are the social ones, such as families, reference groups, and friends who influence the decision-making process (Howard, Sheth, 1969).

Also, it is important to note how information seeking can take place pre-emptively and continuously, observed from the "connection with the purchase" point of view. Also, it can act both internally and externally, from the "source of information" point of view (Kesić, 2006). This paper focuses on the pre-purchase information search, after the consumer has already discovered the problem (Kesić, 2003). The source of information to be observed in this paper is exclusively external and includes ads, friends, family, exhibitions, journals (Kesić, 2003). They are defined in degrees of attention, perception and effort directed toward obtaining environmental data or information related to the specific purchase under consideration (Beatty, Smith, 1987).

Which sources of information will be most noticed by individual groups of consumers depends on several factors. There are three main theoretical consumers' frames concerning product information search (Srinivasan, 1990):

1. Psychological approach based on motivation,
2. An economic approach that explains the cost-benefit strategy,
3. Access to value-based information, focused on memory and human limitations and its cognitive information processing.

It has also been proven how searching and acceptance of different sources of information depends on personal skills and motivation, which are the two elements needed for a consumer to understand the information, and apply it to the purchasing decision (Brucks 1985). An extended version of determinants that influence the acceptance of various sources of information by the consumers includes knowledge, involvement, beliefs and attitudes, as well as demographic characteristics (Kesić, 2006).

Consumer knowledge refers to objective knowledge that implies what the consumer already knows about the product, and subjective knowledge as a perception of the volume of product knowledge (Brucks, 1985). Their

correlation has a stimulating, but also restrictive effect on the search for information. Namely, when a customer perceives the volume of information as sufficient, he will not allow new sources of information to influence his decisions. However, if he knows that he does not have enough information to make a purchase decision, he turns to new sources (Schmidt, Spreng, 1996).

Involvement, as an influencing element on sources of information, explains how consumers are involved in seeking information when having a greater interest in the product, and vice versa (Engel, 1993). They also spend more time looking for information as their involvement and interest increase (Celsi, Olson, 1988).

Beliefs and attitudes are the third determinant affecting the search for information, explaining that individuals, who enjoy the buying process, are more motivated to seek information and are inclined to accept more sources of information at once. On the contrary, those who have a negative attitude towards buying, discard certain sources, and focus on a small number of them (Schmidt, Spreng, 1996). In addition to that, the beliefs that consumers have towards a particular product category, the manufacturer or the brand, affects the scope of their search. This is explained by the fact that consumers are investing more energy in seeking information if the perceived benefit of having this product is high. (Kesić, 2006).

Demographic characteristics are the ultimate variable influencing the consumers when evaluating different sources of information. Research has shown that specific demographic characteristics are associated with the scope of search. It is stated that older consumers have more experience, so their need for a countless number of sources of information is lower than that of younger consumers (Kesić, 2006).

The importance of discovering sources of information lies in the fact that the right source reduces the risk (Bennett, Harrell, 1975). In a situation where a consumer has enough information and has gathered them from a trustful source, then his reliability in buying a particular product increases. That is why, in the future, consumers always pay close attention to the credible sources (Schmidt, Spreng, 1996). Also, the perceived risk will increase the need for information seeking and even from multiple sources, until the risk is completely eliminated. There are four types of risks which concern customers; the perceived risk of whether the product will work the way it was promised, the social risk of the product being liked by people around them, the risk of uncertainty that perceives the danger of constant technological progress and the rapid outdated nature of the existing product, as well as the psychological risk of consumer safety when using the product (Beatty, Smith, 1987). The risk addressed in this paper is the psychological risk. In this case, mothers in the role of customers, pay most attention to the safety of toys. Although they are not the users of the product, the consumers are their children, they still carry a psychological risk. Thus, it was found that more than 41% of the parents were most concerned about toy safety during the purchasing process (fieldagent.com).

Now, when the theoretical framework of information search has been established, it is necessary to focus on the types of sources of information that will be dealt with in this paper. The consumer gets information from three main sources: marketing as the dominant source, consumers as the dominant source, and some neutral sources. Only the first two types will be discussed in this paper, since the third has no particular impact on the work and its research.

Marketing-dominant sources include sellers, packaging, advertising, sales promotion, and other sources under the control of a marketing specialist. They are most effective in the first phases of creating familiarity and interest in a product or brand (Kesić, 2003). This can be explained by the fact that marketing-dominant sources provide clear information about the product and its performance, and therefore serve as a good source of information for making a purchase decision (Vlašić, Janković, Kramo-Čaluk, 2011). As noted, they imply different types of sources of information and the theoretical framework will be given only for three types, due to their use in the research work. These three types are advertising, sales promotion aimed at consumers, and the Internet and catalogues as forms of direct marketing communication. Table 1 summarizes the sources of information that are relevant to this work and the ways in which they have the biggest impact on consumers.

Table 1. The ways in which different marketing-dominant sources influence a purchase decision

SOURCES	TV	Sales promotion	Internet/Social networks	Internet/Web sites
Building product awareness	***	**	***	**
Transfer of important information	*	*	**	***
Building brand personality	***	**	***	**
Building loyalty	*	*	***	*
Excitement/emotions	***	**	***	**
Consumers' inspiration	*	***	*	**
Invoking Loyalty	**	*	**	**
Connecting people	*	*	***	***

Source: Batra R., Keller K. L., Integrating Marketing Communications: New findings, new lessons and new ideas, 2016., Journal of Marketing, Vol. 80, p122-145.

Table 1 clarifies the main advertising types, television, sales promotion, and the Internet, through social networks and websites, and the impact they have on consumers when it comes to product information. The aforementioned will be used in the research part of this paper, where it will be attempted to prove, or refute this in the case of generations X and Y mothers, when purchasing toys.

Advertising is paid, impersonal communication from a certain organization, identified in the message through various media, with the aim of informing and persuading members of the public (Bovee, Thill, Dovel, Burk Wood, 1995). It is a marketing-dominant source of information since it is a paid form designed to present the product to a broader audience with the aim of achieving communication, economic or both effects (Kesić, 2003). There are two basic advertising functions: communication and sales. Informing, as a part of the communication advertising function, is the most important issue in this paper. It is about informing the consumer of the product, its features, the selling point and the price. Also, it provides information for the consumer concerning the benefits that one can expect from the product.

In order for advertising to be sent by an advertiser (sender) to a consumer (in the research the recipients are mothers), different communication channels need to be studied.

Table 2 shows the comparison between the generations X and Y according to their most important characteristics and personalities, which represents an important starting point for the research part of this paper.

Table 2. Generation X and Y mothers according to characteristics and their comparison

GENERATION	X	Y
Year of birth	1960-1980	1981-2000
World population	1.44 billion	1.72 billion
Characteristics	Pragmatic Thinking globally Technologically educated Informed Trusting themselves Independent Work to live	Serve to community Technologically educated Technology-minded Tolerant Reliable Optimistic Socially conscious
Consumption style	Cautious	Compulsory
Communication style	Email, SMS	Social networks
The most used technological device	Laptop/computer	Mobile phone
Decision making	Team work (with kids)	Individual
Values	Family	Accomplishment
Critical point	Educating children in the right way	Being concerned how other people see them as mothers

Sources: Zemke, Raines i Filipczak, 2000. Generations at work: Managing the clash of veterans, boomers, Xers and non-Xers in your market place, Mobile Consumer Culture: Analysis of the US Smartphone Consumer Market, <http://www.data-charts.com/mobile-consumer-culture-analysis-of-the-us-smartphone-consumer-market/> (access 20.11.2016.), <http://re-generations.org/generation-connections/> (access 20.11.2016.), <http://www.mothermag.com/millennial-parents/> (access 20.11.2016.).

The characteristic of the generation X mothers and the sources of information they use can be shown in the way they communicate. It is straightforward, open and uses clear, current facts. They often communicate informally and share information quickly and consecutively with other mothers. E-mail is the preferable communication medium when it comes to selecting technological innovations (wmfc.org). They are also more involved in activities that imply a particular task, such as online shopping, product survey and review, and photo organization (parentingmagazine.com).

Generation X mothers use a combination of different sources, including traditional print media, but also electronic media, the Internet and social networks. However, friends and family have a strong role to play in influencing the decision-making made by the mothers of that generation (Miller, 2013). Research in the US from 2015, has shown that television, as a source of information, remains on top, followed by the Internet, print media and radio (statista.com).

Generation Y differs from generation X, both regarding personal characteristics and sources of information. Speaking of marketing-dominant sources, digital media is the number one source when it comes to product information search. Also, generation Y mothers have a great influence on each other. More than any other generational group, they are willing to share information found with other mothers, and declare themselves a good product advisor (KRC Research for Webershandwick.com).

The Generation Y are urban, young mothers who look on social networks as personal advisers, and channels for sharing information with others. For example, 46% of them uploaded the image of their newborn child to one of the social networks (as opposed to just 10% of the mother of the X generation). It is proof that this generation of mothers sees the Internet as a "saviour", and they look for all answers in virtual reality, which they experience as a place to connect with other people, but also to express their feelings and attitudes (mothermag.com).

The research carried out by American agencies AOL and OMD Worldwide, in 2013, claims that mothers of this generation spend up to eight hours using marketing-dominant sources, including 2.6 hours on the Internet, 2.1 hours on television, 1.2 hours on radio, and about 30 minutes for newspapers and magazines. Also, seeking information that will help them in parenting is the most common purpose of spending time using these media. 79% of them opted to practice online shopping, 71% ask for product or service information, and 52% seek for discounts and coupons. Moreover, 83% of this generation's mothers said they shared the experience of a particular store or product on social networks. 75% stated that they would rather buy a product for which they have a coupon or discount (Yasav, 2014).

Blogs are, as a source of information for young mothers, extremely important, and their influence and perception is rising. This can be witnessed by the fact that young mothers can identify themselves with other mothers, whether anonymous or celebrity mothers. Blogging is based on the

principle where a company makes a contract with a blogger mom, and she writes product reviews, publishes videos about using that product, or simply invites her public to try the product (The Goldman Sachs Group, 2015).

When it comes to consumer-dominant sources of information, 82% of generation Y mothers acknowledge they will talk to their mothers or friends about a particular issue. This fact suggests how young mothers, who do not yet have enough experience, trust their close friends and family when making a purchase decision. Web pages affect purchase decision for 73% of them, and 69% said how advertising in print and digital format have the biggest impact (Yasav, 2014).

Briefly, when seeking information about good parenting, buying children's food, cosmetics, and toys, generation Y mothers believe in advice and recommendations from their own mothers (40%), their own intuition (15%), parenting portals blogs (13%), friends (8%), other social networks (5%) (Schawartz, Gaffney, 2015).

Table 3. Mothers as a source of information for other mothers, reporting how they found the product they like

SOURCES	Mothers X	Mothers Y
I call a friend/Wait to meet a friend	78%	69%
I send an e-mail to my friend(s)	49%	37%
I publish a post on a social network	15%	28%
I write a review on the store's website	23%	26%
I publish and discuss this in a forum	6%	10%
I do not tell anyone about it	10%	9%

Source: Radar Research by Sugar Inc. „Why Y Women“, available on <http://media.onsugar.com/static/imgs/WhyYWomen.pdf>

It is important to notice what mothers do when they come across a product that they consider good, whether for themselves or their child. They can serve, as a source of information, to others in helping them make a purchasing decision, or just to confirm their opinion. Mothers of both generations prefer to communicate with their friends directly, but, as expected, Y mothers share their opinions on social networks much more than X mothers (28% versus 15%). This only strengthens the fact that generation Y mothers are the mothers of the digital age.

However, when comparing the producer as a marketing-dominant source, and friends as a source which is not controlled by the company, it is apparent that younger mothers are more attached to both sources than generation X mothers. The explanation lies in the fact that young mothers socialise more and have a larger number of friends they trust. Meanwhile, older mothers spend more time at home.

Table 4. Mothers as a source of information for other mothers, reporting how they found the product they like

SOURCES	Mothers X	Mothers Y
Family and friends	61%	77%
Visiting stores	53%	62%
Browsing web pages of stores and manufacturers	40%	42%
Reading reviews of other product users	39%	44%
Store's catalogues	31%	18%
Emails received by sellers	26%	25%

Source: Punchtab, 2014., Holiday Shopping Whitepaper, <http://www.adweek.com/socialtimes/survey-reveals-social-shopping-habits-spanning-generations/206940>

In a situation where mothers seek information that will help them make a decision about buying gifts, toys in the research, they mostly trust their families and friends. They see them as a confidential source with a certain experience. Generation X mothers are at the forefront of browsing stores' catalogues (31%), compared to younger mothers (18%). They prefer the Internet sources, such as reviews written by other users (44%) and blogs (26%).

Comparing the sources of information used by the mothers of the two generations, it can be said that in general, mothers of the X generation still prefer traditional sources, such as television and magazines, but are getting closer to mothers Y when it comes to digital sources. By contrast, generation Y mothers mostly rely on the Internet sources of information, such as social networks, blogs, and forums. This can be explained with the Y generation's characteristics, as they were born and raised in the digital age, and who have no fear and prejudice regarding the latest forms of communication. Both generations consider their family and friends to be extremely important sources, especially when buying a product with a higher safety risk. However, regarding this, generation Y is a bit ahead of generation X. They seek their mothers' advice somewhat more often than the generation X mothers, which is logical since they are younger and more inexperienced than the older generation mothers.

4. RESEARCHING THE IMPACT OF DIFFERENT SOURCES OF INFORMATION ON MOTHERS OF GENERATION X AND Y WHEN PURCHASING TOYS

Since the research was conducted in two phases, where the first phase refers to the pre-Christmas period, and the second phase to the post-Christmas period, their results will be presented separately. It should be noted that the first stage of this research presents a base, and it can be applied to all parts of the year, regardless of being carried out during the pre-Christmas period. After that, the second

phase will be briefly described regarding the specificity of the situation to which it relates, namely buying toys on special occasions, more specifically for Christmas. In the end, a cross-section of both phases will be drawn, and a conclusion will be made.

The first phase, the interviews, took place in the period between 28 November 2016 and 13 December 2016 in Zagreb. The stage is referred to as the "pre-Christmas phase" for easier identification of the interview period. However, only the last set of questions referred to the influence of various sources of information on mothers when buying toys for Christmas, while the majority of questions concerned the impact of information sources when buying toys in every day life.

Generation X mothers are more sensitive to television as a source of information, watch various TV programs more, and spend more time watching TV in general. In most cases, they will pay attention to ads, especially when they are in the information search phase. On the other hand, the generation Y mothers declare to be rare television watchers, generally due to lack of time, and search for information only in children's content ads. What is common with these two generations is television as a source of information which impacts their children, and then indirectly them too. This fact is confirmed by the number of toys the children of the respondents have, which exhibit the characteristics of the cartoon/series they watch.

Neither newspapers nor magazines, as forms of print media, represent an important role for mothers when purchasing toys. Both generations claim they do not have a habit of using them, and they find digital editions much more practical. Also, none of the mothers, who read newspapers, bought a toy, or any other product, after being stimulated by the information from newspapers or magazines in the print edition. No mother, from both generations, has talked about any form of printed media as an important source of information, nor even mentioned it during an entire conversation, until the author proposed it as an option. It can be concluded that newspapers and magazines are not important here, however, the size of the sample should be taken into consideration, indicating the possibility of different results in a larger sample.

The catalogues are for both generations an extremely important source of information when it comes to buying toys. They are almost always the initial source of ideas about the toys, after which the generation X mothers switch to other sources, such as television, or the Internet for Y generation mothers. Ease of the displayed content, delivery to home address, and reading in leisure time, are the most common reasons why mothers advocate this type of source. Bubamara, Muller and Konzum are the stores from whose catalogues mothers of both generations often draw ideas and information. The only larger gap lies in the fact that children affect mothers of the generation X through those catalogues, while no such response was noted with the generation Y mothers.

In the X generation, mothers who do not accentuate Internet as the primary source of information are dominant, while stating they spend, on average, one hour a day on the Internet. Respondents of the Y generation are a lot different in that case. They emphasize the Internet as the most important source of information in everyday life, as well as when buying toys. They are great advocates of social networks, blogs and forums and will easily find themselves in the examples of celebrity mothers, while with generation X that is not the case. They primarily use the Internet as their source for price comparison and visiting web shops, and are not affected by social networks and celebrity mothers. The interviews revealed a gap between the two generations when it comes to the Internet as a source of information in general, but also when purchasing toys, which coincides with the previous research.

Coupons are still a source of information of great importance, and the root of ideas for mothers of both generations. They are more commonly used in everyday shopping, but when purchasing toys, they will serve as a motivator for buying a specific toy. Therefore, their role as a source of information when purchasing toys, for both generations, is negligible. They both use them when there is a price difference, while for Generation Y there is frequent use of coupons when purchasing toys for children who are not theirs. Generally speaking, the interviews found that coupons serve as one of a few sources of information, but never as the most important source and never exclusively. They will always be combined with some other sources, such as children or the Internet.

Although web shops are increasingly attracting mothers' attention, going to a physical store is still a preferable way for many mothers when searching for information. Thus, generation X mothers tend not only to get ideas in store, but they also purchase impulsively without getting more information, while the Y generation mothers are still more careful about it. They will use additional sources to be sure about their idea which they purchased instore. Also, the reason for going to a physical store is different between the two generations, so generation X is more prone to price detection and toys comparison, while the reason for generation Y is the ability to observe the quality of the toy. In general, both generations' mothers do not hesitate to pay attention to toys at the store even when they do not need them.

It can be said that there are some neutral sources of information are from TV when talking about generation X mothers, and from the Internet for generation Y mothers. At the same time, sharing information with their family is more preferable for X mothers, and with friends with Y mothers. This can be explained with the fact that generation X, by definition, is more family-oriented. Generation Y is characterized as more self-reliant, while considering their friends family. Speaking about the last neutral source, the children, they bring the mothers of both generations together. Children are the crucial source of information when buying toys, and their impact will

be considered if the toy is what they really need, and the price is acceptable to mothers.

The last set of questions in the first interview referred to Christmas toys shopping, in order to find out if the mothers of both generations use other sources of information when buying Christmas gifts. This is of great importance considering that this event is to mothers the most special, including their children's birthday. During the first phase of the interview, eight out of ten respondents of the generation X stated that they were already thinking about buying Christmas gifts, and that it would be a toy. Getting the idea for buying it came primarily from their children, said six out of eight respondents. Five of them spoke about their children writing letters to Santa Clause. This was a way of getting an idea for buying a Christmas gift. The remaining three respondents did not say the same, which was expected due to the age of their children. Since they are too young for what, mothers are those who get the idea from the marketing-dominant sources. After getting ideas from their children, five respondents said they will devote more time looking for information about the price, stores, brand comparison, and the quality of similar toys.

Seven out of ten respondents argued that they would, or already did, start paying more attention to television content, including advertisements for toys. The mothers agree that such ads are frequently broadcast in the pre-Christmas period, but that does not bother them as they get useful information. They also point out how their children got ideas thanks to some television programs, which enables them to buy exactly what their children want. Speaking of catalogues, there will be no change, mothers will not use them more or less than usual. Only two respondents said that they would start searching more self-initially and look at catalogues to get additional information. Print media will not experience more popularity either, since mothers do not consider it a useful source for this situation. Regarding the coupons, mothers stated that their children would get what they want for Christmas, so the use of coupons only applies to the situation where the coupon coincides with the toy that the child wants.

All six respondents claim that their children are old enough to express their desire for a toy, so a coupon will not change their mind. For the remaining four respondents, coupons might change their mind, as they are the ones deciding which toy to buy. Only four mothers will use the Internet, two of them immediately at the beginning of the information search, and two after using some other sources. Mothers point out that stores' Web sites will be most used, when talking about their Internet activities. Regarding the neutral sources neutral sources, as has been said above, children and their wishes are the most important, where all respondents agree that children will get the toy they want. However, they note that this is not an everyday occasion. Since most of them, more specific six, have already formed their opinion on what to buy, they say nothing would change their mind; neither coupons, discounts, or any other distraction in the physical store

or the reviews of other mothers, especially not celebrity mothers. They agree that these factors would have an impact on regular shopping for toys, but for special occasions they do not play an important role. The last aspect of the interview explains a perfect situation where respondents get all the information they need as they wish. The most striking source is a coupon with the exact same toy which their child wished for, giving information about the price, the place of purchase and the purpose. Similar situation is with catalogues. Mothers would like to receive them in their post box, providing all the information they need, without needing to involve other information sources. The mothers emphasized that the ideal source would be one which saves them the search time and gives them all the information they need in the same place. Finally, mothers talked about specific toys they intend to buy for Christmas, and this information is important due to the comparison with the second stage of the interview. The listed toys are: Ironman; idea derived from the child and the information found on the Bubamara website, a fire truck seen in the Muller catalogue, the Lego cube seen by the child in the Muller catalogue, Frozen nail set seen on television, Monster puppet seen in the Muller catalogue, a Lego air plane seen in the Muller catalogue, Violetta earbuds, a child's idea.

The Situation with generation Y mothers is similar when talking about the beginning of planning to buy a toy for Christmas. Seven mothers already began to think about buying presents, while three of them said they were not thinking about it yet. Of all the mothers, only three said they would pay more attention and invest more time in gathering information on the Internet, and in conversation with friends. This generation, as well as the previous one, state children are the main source in case of buying toys for Christmas. Thus, children of six mothers wrote letters to Santa Claus, from which the mothers then drew ideas. After that, they sought further information on the Internet, such as where to buy and what the price is. Five mothers said they would share the gathered information with their friends, and they would probably get the desired feedback from them. Television and print media would not be dominant when searching for Christmas toys, said all the mothers, nor will it play a more important role than usual.

In this case, the children will get the toys they want, said six of the mothers, while the children of the other four will get the toys the mothers considered good for their development. A child's wishes would not be considered here due to the premature age, mothers say. Also, the respondents point out that coupons can change their mind as they do not have a fixed idea of what to buy. They also say that in this case less attention will be paid to mum reviews on parenting sites, or to recommendations of celebrity mums, purely because of their children's wishes. The ideal situation for generation Y respondents, when obtaining information, implies a catalogue received personally via e-mail, with toys intended solely for their children's age. Also, the catalogue would not be just from one store, but would summarize the same toys and give a price comparison from different retailers. Furthermore,

the catalogue would describe the toys and their purpose, and would also offer the option of online shopping and home delivery. It is obvious that generation Y mothers want the sellers to recognize their individual needs, and provide them with information which they can use immediately and easily.

The toys the mothers mentioned, and which are intended for Christmas, are a pair of gloves by Frozen, a child's idea (daughter), a remote-sighted car from Muller and a car ride as a child's idea, Violetta puzzles, a microphone and a Barbie doll as a child's idea, a board game seen on the store's website. Other examinees do not have a specific toy in mind yet.

The second phase of the in-depth interview, called the "post-Christmas phase", took place in the post-Christmas period, more precisely, from January 2 2017 until January 10 2017, when the respondents already bought and given the toys. The second phase of the interview was followed by the first one, so the dominant sources of information did not change regarding everyday life and Christmas time for both generations of mothers. Children, as a neutral source, dominated with all the respondents, especially in the generation X. Given the fact that their children are older and more able to collect information and pass them on to their mothers by their age, this was expected. After getting the idea from the child, the generation X mothers were searching for further information mostly on TV and in catalogues. The aim of the search was to find out where to buy the toy. On the contrary, generation Y mothers used the Internet as a source, through which they got the information about what to buy for a certain age o, where to buy it and at what price. The toys presented on television were the ones bought by the generation X respondents. These toys are: Lego's cages, Frozen dolls and Violetta sets. The generation Y mothers' purchase of toys was driven by online sources.

5. LIMITATION OF THE RESEARCH

The primary limitation of the carried out research was the size of the sample. The sample included twenty respondents, mothers, who participated in-depth interview. All the respondents were from city of Zagreb, therefore, the results cannot be applied to the entire territory of the Republic of Croatia.

Furthermore, since the subject of the paper is related to the children of the respondents, and the act of buying toys for children, it is normal to assume that the mothers were subjective in terms of their responses, not intentionally wanting to present themselves in the best possible way.

6. CONCLUSION

Given the fact that the digitalized world has become more advanced, and the Internet is used more frequently, in all its forms, especially as a source of information, it is

no wonder that number of its users increased as well. Generation Y mothers grew up in that world, so they are attached to this kind of information search every day, while the generation X mothers are close followers, using the Internet more and more.

Previous research, as well as this one, has shown that there is a difference between X and Y generations in using different sources of information. The obtained results could be useful to the toy store managers in looking at the difference between the generations and creating two different approaches for each group of the mothers. Generation X have developed their own way of decision making and firmly believe in themselves due to the experience they have. They focus on the family and quality of life, they take into consideration their children's opinions more, trying to provide them with everything they want, and they themselves did not have. They prefer traditional media and sources just because they are not used to and they still do not trust the new sources. This fact has been proven by the presented research where it has been shown that television and catalogues are their most reliable sources of information and that they are highly under their children's influence. Although they subconsciously know that they should not always give in, generation X mothers provide their children with what they want. Considering the above said managers should focus their attention on children and provide them with information through the channels they prefer. This particularly applies to television, at a time when the content that children love it displayed.

For the mothers of this generation stronger advertising is advised at later times when mothers watch more TV, and they pay attention to the TV content. Also, personalized catalogues are precisely what these mothers need in order to buy exactly what is offered. These mothers like to skim through catalogues, and they often buy what they see inside. It is the same with their children, since they even mark the wanted items. The recommendation is to sum all the information needed in one place so that the source is enough for these mothers, but also to include the toys solely for the age of their children. Regarding the existing database, the store or manufacturer has information about the mother and the age of her children, and can adjust the contents of the catalogue, offering only toys which are suitable for the age of the children. In this way, it is possible to expand the choice of toys that would be interesting to this specific group of mothers and their child. This leaves more room for information about the content of toys, their composition, price, and country of origin.

A personalized approach will reduce this generation's innate scepticism and suspicion, and will contribute to easier decision making when purchasing a toy. Direct email can help here, as an Internet source which the generation X mothers know about and trust. The last recommendation is related to coupons, which did not have a special significance in this research because with them they never find what they need, said the X mothers. In accordance with their statements, that they would use

coupons only if they really needed an item marked on the coupon, it is recommended to incorporate toys which are required by the mothers at that time, given the age of their children.

A theoretical approach mentions generation Y respondents as mothers who grew up online, with a broadly developed network of friends, and reluctantly self-reliant. These mothers should be accessed through online sources, and specifically in the early stages of pregnancy. During that time, they are looking for more information and have more free time for discovering options. If they already become attached to a particular manufacturer and toy at that stage, it is likely that this adherence will be prolonged to a longer period of time. They pay special attention to the mental development of the child (in comparison to X generation mothers who pay attention to social development), so they need more information about how a particular toy serves this purpose. Using YouTube channels for this is also recommended as these mums are extremely visual types, and have very little experience and knowledge. So, toy manufacturers can make their own YouTube channel where the main characters will be exactly the toys in their assortment. This is also recommended because the children of Y generation mothers are increasingly watching cartoons on YouTube channels, rather than on TV.

Also, these videos can show the purpose of the toys, and provide detailed information for mothers. Furthermore, due to the increased exposure to ads for this generation's mothers, a recommended approach is to make attractive ads which will draw their attention. Thus, good humour or inclusion in socially responsible actions are considered as positive ways of attracting their attention. They are somewhat distrustful to themselves and have developed a wide circle of friends. This has been proven by this research where all the mothers of this generation said they exchange information with friends when making a purchase decision. In this way, word of mouth plays a major role, and information providers are affected the same way as recipients, taking into account their generational affiliation. By "following" celebrity mums on social networks, reading and believing what they say, it is advisable to give them toys to try and write about them on social networks. In that way, generation Y mothers will get information through a confidential source. No additional investment is recommended in print media sources, coupons, or television because of the drastically low popularity for these mothers. It is more logical to focus on sources which generation Y mothers perceive as credible and desirable.

There is a clear difference between these two generations when it comes to the preferred sources, so it is necessary to know, and in the right time who is the customer and what age group they belong to. In this way, any party who is interested in offering a product to a mother can focus on the individual needs of each of them, and create and distribute information at preferred time and through the sources the mothers prefer the most.

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ONLINE SOURCES

1. www.fieldagent.com
2. <http://www.mothersmag.com/millennial-parents/>

STUDENTS' SATISFACTION WITH BUSINESS STUDIES AT PUBLIC FACULTY VS. PRIVATE SCHOOL IN CROATIA

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ABSTRACT

Due to the rapid increase in the number of Business Schools, the question regarding overall quality of higher education and the extent to which they are threatening a well established public universities that stand for decades is imposed. Therefore, the main purpose of this paper is to determine students' satisfaction with two institutions of the same study area, business economics and management banking, insurance and finance, but different status of founder – public university and private school, both on the undergraduate and graduate level. Also, consequently, the goal is to analyse whether there are some differences in students' satisfaction between these two institutions and also examining the correlation to determine which of the elements of satisfaction (the quality of teachers, non-teaching staff, environment and organization) influence the most overall students' satisfaction.

KEY WORDS: Students, satisfaction, business studies, public faculty, private school, Croatia.

1. INTRODUCTION

Student's satisfaction is one of the most important factors to consider in order to ensure students' loyalty, as well as enrollment of students. Students are actually agents who promote its own faculty and whose word of mouth can improve faculty's reputation on the market, but also public opinion about satisfying customer's needs. The degree of student's satisfaction with faculty primarily depends on quality of teaching and curriculum.

Faculties record increase of qualified and qualitative students as a consequence of their better education, what could lead to better results when employing them, and finally, to increase of faculty's reputation (Owlia i Aspinwall, 1997). Faculty's better reputation increases the number of enrolled students, what opens the possibility of selecting capable students who would, after the end of studies, be included into highly qualified and qualitative work force. However, in order to achieve this, high level of capability of teaching staff is needed, what also includes good quality of equipment and other accompanying contents whose availability and quantity depends on the faculty's financial abilities. The increase of faculty's financial ability is possible through supports and donations which depend on the already mentioned good reputation. This is the way of closing a huge, dynamic circle of elements of faculty's quality which influences students' satisfaction and loyalty. Reverse sequence would be valid if the circle starts with

bad quality and low level of students' knowledge (Owlia i Aspinwall, 1997).

Due to sharp increase in the number of private Business Schools in Croatia, the question regarding overall quality of higher education and the extent to which they are threatening a well established public universities that stand for decades is imposed. Therefore, the main purpose of this paper is to determine students' satisfaction with two institutions of the same study area, business economics and management banking, insurance and finance, but different status of founder – public university and private school, both on the undergraduate and graduate level. Also, consequently, the goal is to analyse whether there are some differences in students' satisfaction between these two institutions and also examining the correlation to determine which of the elements of satisfaction (the quality of teachers, non-teaching staff, environment and organization) influence the most overall students' satisfaction.

2. LITERATURE REVIEW

2.1. Private and public faculties as a source of satisfaction, loyalty and students's trust

Private faculties are the ones which maximize its profits

by determining the amount of scholarship, while public faculties maximize social wealth following state's and administrative bodies' instructions (Oliveira, 2006). However, the increase of higher education institutions leads to the increase of expectations and bigger competition. So, no matter public or private faculties, they compete not only in scientific and specific areas of interest, but also in the increase of students's interest, finding teaching staff, creating resources and finally, creating a brand (Anil i Gulnur, 2013). Despite that, in some researches, students of private faculties are described as the ones who expect "value for money" and consequently act like consumers demanding more of the services provided, compared to the students from public faculties (Dean i Gibbs, 2015).

The key of private and public faculties' success is a change of students' status from "consumers" to "satisfied and loyal consumers", what is possible only by providing higher education institutions' services which satisfy students' needs and wishes in a more superior way than the other higher education institutions (Carter and Chu-May, 2016.).

In order to accomplish this, it is necessary to find the elements of satisfaction, that is, dissatisfaction, which certain institutions find the most important for retaining already mentioned high quality. Different authors explain differently the most important elements of students' satisfaction which should be continuously interrogated. Elliot and Shin claim that students' satisfaction depends on teaching staff, their support, classrooms' equipment (modern technology), but also accompanying contents outside the faculty (Eliot and Shin, 2002.).

Tsinidou, Georgaiannis and Fitsilis claim that key factors of satisfaction are teaching staff, library's services, curriculum, faculty's location and infrastructure including food, appearance of the classroom, sports and the possibility of career development (Tsinidou et all. 2010.). Ravichandran i Kumar claim that standardized curriculum, quality study programmes, sympathetic administrative staff who is always willing to solve students' problems and equal treatment towards all students, are variables which affect services' total quality and students's satisfaction (Ravichandran i Kumar, 2010.).

Finally, if all the mentioned is on the satisfactory level, faculties will have loyal students. From the marketing perspective, students' loyalty should be the main goal of the most of higher education institutions due to three reasons. First of all, these are private faculties' scholarships. New students are attracted by positive word of mouth of current or former students, what would also mean influx of financial resources as a basis for faculties' future activities. Secondly, loyal students could have a positive impact on the quality of teaching through their participation and "loyal" behavior and, finally, loyal student is ready to support its faculty after graduation, whether it is about continuation of studying and getting higher status or positive word of mouth.

The biggest advantages that arise from students' loyalty are actually not limited only to studying period, but are

probably even bigger than after the end of study and getting a degree (Hening- Thureau i sur., 2002.).

2.2. The importance of higher education quality

During the internal evaluation of higher education institution's quality, it is necessary to conduct self-analysis to determine appropriateness of content and efficiency of study programmes in terms of achieving expected outcomes and also to examine the efficiency of grading by students.

Additionally, it is necessary to examine efficiency of teaching and studying according to which are assessed (Ivković, 2009.):

1. type and appropriateness of applied teaching methods
2. way in which students' participation in class is encouraged
3. quality of teaching materials
4. strategies of teachers' development due to improvement of teaching quality
5. efficiency of team work teaching
6. load of students

Apart from that, internal quality evaluation includes conducting students' surveys which are used to interrogate students's opinion regarding teaching programmes and the work of certain teachers (Ivković, 2009).

In higher education measurement of quality increases by increase of faculties' responsibility towards its participants, and each of the participants, such as students, state and professional bodies, has its attitude regarding quality in accordance with their specific needs (Annamdevula i Bellamkonda, 2016).

Results of numerous researches have shown that students in whose schools is more qualitative atmosphere have better achievements, socio-economic health, more self-respect and less incidence of problematic behavior (Tubbs i Garner, 2008). Institutions' atmosphere includes different components, for example, environment – time and space context, interactions of institutions' members (Ljubetić i Bubić, 2015), as well as their life and professional philosophy, values and attitudes (Soccorsi, 2013).

However, there are many elements of low-quality study programmes and study's organization, what could be seen through elements on which students complain, and these are: lack of praxis, surplus of theory and repetition by different teachers, lack of availability to the labour market, bad logistics, constant collision between two mandatory modules, expenses when transfer from undergraduate to graduate study, incompatibility of ECTS points, leaving students to their own potential if they want to participate in student exchange programme, bad international cooperation, etc. (Marinković, 2011).

Improvement of efficiency and quality of higher education and improvement of Croatia's educational image is possible to achieve only with already mentioned continuous evaluation of educational institutions's internal quality and interrogation of students' satisfaction, all of it due to increase of students' satisfaction and removal of previously mentioned problems to which students indicate.

3. STUDENTS' SATISFACTION RESEARCH – PUBLIC VS. PRIVATE BUSINESS SCHOOLS

3.1. Aims of research

Aims of research primarily relate to determination of students of Faculty of Economics and Business Zagreb and High Business School Libertas satisfaction level in terms of 4 observed segments: quality of teaching staff, organization of the study, environment and non-teaching staff in order to finally get the result – overall students' satisfaction on the mentioned studies. So, interrogated students are the ones within the same area of studies – business economics – with similar curriculum, but different status – Faculty of Economics and Business Zagreb is public faculty and High Business School Libertas is private school as a component of private university. This is why, in the last part of the research, a comparison of students' satisfaction on both institutions was conducted and determined whether there is a correlation between certain elements of satisfaction and overall satisfaction.

3.2. Methodology

Empirical research was conducted using questionnaire as research instrument on the sample of 285 students. Questionnaire was formed according to researches: Kesić and Previšić (1997), Vranešević i sur. (2006) i Puška i sur. (2015), and it included 13 questions structured in 5 groups – determination of demographic and socio-economic characteristics of students, motives for study enrollment, general information about study, satisfaction with certain elements grouped into 4 categories, including quality of teaching staff, organization of study, environment and non-teaching staff and, finally, determination of overall students' satisfaction. Satisfaction with certain factors and overall satisfaction was measured with Likert's scale 1-5.

Total sample included 285 students, out of which 153 students were from Faculty of Economics and Business Zagreb, and 132 students were from High Business School Libertas. Research was conducted on each faculty separately for undergraduate and graduate study. At High Business School Libertas and undergraduate study of Faculty of Economics and Business Zagreb questionnaires were given to students who fulfilled them independently and anonymously, while students of graduate study at Faculty of Economics and Business Zagreb fulfilled the questionnaire online, but also anonymously.

3.3. Research results

Analysis of examinees characteristics shows that the biggest differences between examinees from public and private faculties arise from the way of financing the study. The biggest number of examinees from Faculty of Economics and Business Zagreb do not pay for their study (67%), while 77% of Libertas' students completely bear the expenses of studying. Also, among examinees from Faculty of Economics and Business Zagreb, almost half of them is on the last year of study (graduate study), while among examinees from Libertas the least number of students is on the last year of study (Table 1).

Table 1. Demographic and socio-economic characteristics of students from Faculty from Economics Zagreb and Libertas

	Variable	EFZG	LIBERTAS
Gender	female	69%	59%
	male	31%	41%
Year of study	first	0%	0%
	second	18%	15%
	third	14%	40%
	fourth	23%	34%
	fifth	45%	11%
Payment of study	I pay entirely	9%	77%
	I pay partially	23%	17%
	I have full scholarship	1%	6%
	I do not pay the study	67%	0%

Source: Authors

Analysis of importance of certain elements of satisfaction with the study show that students from public and private faculty agree that the most important factor of satisfaction is quality of teaching staff, then organization of the study, environment which includes library and classrooms and in the end – non-teaching staff (Table 2 i 3).

Table 2. Rank of importance of elements of satisfactions with study at the Faculty of Economics Zagreb

	1.place	2.place	3.place	4.place
quality of teaching staff	56,86%	21,57%	8,50%	13,07%
organization of study	22,88%	47,06%	22,88%	7,19%
environment (classrooms, library)	9,80%	17,65%	54,25%	18,30%
non-teaching staff (administrative staff, librarians, secretaries)	13,07%	16,34%	16,99%	53,59%

Source: Authors

Table 3. Rank of elements of satisfaction with study at High Business school Libertas

	1.place	2.place	3.place	4.place
quality of teaching staff	68,18%	20,45%	4,55%	6,82%
organization of study	21,97%	60,61%	12,88%	4,55%
environment (classrooms, library)	5,30%	9,85%	48,48%	36,36%
non-teaching staff (administrative staff, librarians, secretaries)	4,55%	9,09%	34,09%	52,27%

Source: Authors

Analysis of differences between the mark of satisfaction factors of students from Faculty of Economics Zagreb and High Business school Libertas mostly manifest in the following (Table 4):

- Teaching staff's readiness to help got 25% higher average mark on High Business school Libertas (4,38) compared to Faculty of Economics Zagreb (3,49).
- Transparency and equality of teaching staff's criteria towards students on High Business school Libertas got average mark 3,97 compared to Faculty of Economics which got average mark 3,05 or 30% lower.

- The possibility of connecting theory with praxis by involving guest lecturers got average mark 2,8, while the same element got average mark 4,00 at High Business school Libertas, which is 43% more.
- Accessibility and kindness of administrative staff on High Business school Libertas is 96% higher than on Faculty of Economics Zagreb and it can be concluded that students from Libertas show high level of satisfaction with this element (mark 4.2), while students from Faculty of Economics Zagreb are dissatisfied (2.14).
- Working hours of administration office on High Business school Libertas got average mark 3.92, while on Faculty of Economics Zagreb it got average mark 2.43 or 61% lower.
- Functionality and the look of halls on High Business school Libertas got 44% higher average mark (4.15) than average mark on Faculty of Economics Zagreb (2.88).
- Students from Faculty of Economics do not show satisfaction with compliance of curriculum with similar faculties abroad, while students on High Business school Libertas are relatively satisfied with that element (3.88).
- Students from High Business school Libertas are more satisfied with duration and concept of undergraduate and graduate study – they study on the principle 3+2 years (m=4.34); while students on Faculty of Economics Zagreb are neither satisfied nor dissatisfied (m=3.12).

Table 4. Comparison of elements of satisfaction of students from Faculty of Economics Zagreb and High Business school Libertas

Elements of satisfaction with the study	EFZG – (mean)	Visoka poslovna škola Libertas (mean)	Difference between Libertas vs EFZG
Teaching staff's readiness to help	3,49	4,38	+0,89
Availability and speed of teaching staff's response via electronica media	3,09	4,18	+1,09
Teaching staff's use of Power Point presentation and audio-visual content	3,85	4,26	+0,41
Clear defining of syllabus at the beginning of the academic year	3,75	4,34	+0,59
Transparency and equality of teaching staff's criteria toward students	3,05	3,97	+0,94
The possibility of linking theory with praxis through participation of guest lecturers	2,8	4,00	+1,20
Administration office working hours	2,43	3,92	+1,49
Accessibility and kindness of administrative staff	2,14	4,2	+2,06
Accessibility and kindness of librarians	2,72	4,1	+1,34
Halls equipment with new technology	2,88	4,06	+1,18
Functionality and the appearance of classrooms	2,88	4,15	+1,27
Functionality of library	4,2	4,41	+0,21
Availability of mandatory literature in library	3,29	3,75	+0,46
Availability of elective modules that you prefer	3,35	3,56	+0,21
Compatibility of curriculum with similar faculties abroad	2,77	3,81	+1,04
The number of available exam dates during year	3,78	4,3	+0,52
Duration and concept of undergraduate and graduate study on this faculty	3,12	4,34	+1,22

Source: Authors

Analysis of overall satisfaction of students from Faculty of Economics Zagreb shows that students are neither dissatisfied nor satisfied, while there is much higher level of overall satisfaction with the study by students from High Business School Libertas (Table 5). The highest mark on the Faculty of Economics Zagreb and High Business School Libertas is given to the criteria "recommendation of the study to future students", what is very important, taking into consideration previously mentioned information about enrollment which indicated the significant importance of

former students' experiences – word of mouth. However, the difference is in favor of High Business School Libertas for 27%. The lowest average mark at Faculty of Economics Zagreb and Libertas is given to criteria "entirely fulfilled expectations" - 3,09 at Faculty of Economics Zagreb and 4,03 at Libertas – what would mean that students from Faculty of Economics Zagreb are for 30% less satisfied than students from Libertas regarding the fulfillment of their expectations before the enrollment.

Table 5. Comparison of overall satisfaction with the study – students from Faculty of Economics Zagreb and High Business School Libertas

Overall satisfaction with the study	EFZG – (mean)	Visoka poslovna škola Libertas (mean)	Difference between Libertas vs EFZG
Study on this faculty completely fulfilled my expectations.	3,09	4,03	+0,94
I am completely satisfied with the study on this faculty.	3,15	4,21	+1,06
I am satisfied with the curriculum and teaching staff.	3,2	4,24	+1,04
I would recommend study on this faculty to future students.	3,46	4,39	+0,93
I think that I would easily find a job after graduation.	3,11	4,06	+0,95

Source: Authors

To determine strength of relationship between certain factors of satisfaction (teaching staff, non-teaching staff, environment and appearance of faculties' rooms, organization of study) with the overall students' satisfaction, Spearman's correlation coefficient was used. Correlation analysis consists of application of procedures in order to determine indicators of strength of statistical relationship between elements (Šošić, 2004. pp. 414). In this paper Spearman's correlation coefficient was used due to ordinal variables. Rankings were assigned to vectors with the results of overall satisfaction and elements of satisfaction and based on these rankings, a correlation coefficient was calculated. Spearman's correlation coefficient of rank is used to measure degree and direction of relationship between elements presented by pairs of rank-variables. If in each pair ranks are equal, their differences are zero, and coefficient is 1. This is the case of complete (perfect) positive correlation of rank. When the order of modality of one rank-variable is reverse from the order of second variable in the pair, coefficient will equal -1, so correlation of rank is complete and of negative direction (Šošić, 2004., pp 424.).

Analysis of correlation coefficient for Faculty of Economics Zagreb shows that availability and speed of teaching staff's response via electronic media, transparency and equal criteria of teaching staff toward students, are completely positively correlated with the fulfillment of students' expectations and the overall satisfaction with the study (correlation coefficient $r = 1,00$). Correlation coefficient $r = 0,90$ shows that teaching staff's readiness to help,

compatibility of curriculum with similar faculties abroad, look and modern technology equipment in classrooms, are firmly positively correlated with the fulfillment of students' expectations and the overall satisfaction with the study. For variables administration office working hours ($r = 0,20$), availability of administrative staff ($r = 0,15$), availability of exam dates ($r = 0,20$) and appearance of library, it could be concluded that they are not correlated with fulfillment of students' expectations and overall satisfaction with the study since correlation coefficients are lower than 0,25.

Analysis of correlation coefficients for High Business School Libertas shows that transparency and equal teaching staff's criteria toward students, look and modern technology equipment in classrooms, as well as availability of exam dates during the year, are completely positively correlated with fulfillment of students' expectations and overall satisfaction with the study (correlation coefficient 1,00). Correlation coefficient $r = 0,90$ shows that teaching staff's readiness to help, availability and speed of teaching staff's response via electronic media, the use of audio-visual contents, clear defining of syllabus, possibility of connecting theory with praxis through participation of guest lecturers and compatibility of program with similar faculties abroad, are firmly positively correlated with fulfillment of students' expectations and overall satisfaction with the study. Analysis of correlation coefficient for Libertas shows that all of the analyzed factors have significant impact on the fulfillment of expectations and overall students' satisfaction since all coefficients are higher than 0,70.

4. CONCLUSION

Due to the rapid increase in the number of Business Schools in the Republic of Croatia, the question regarding overall quality of higher education and the extent to which they are threatening a well established public universities that stand for decades is imposed. It is considered that private schools in Croatia do not provide high level of quality of education and that the level of knowledge, as well as quality of education of students who graduate from public faculties, is significantly higher. On the other hand, since students and their level of satisfaction with the study are important factor of loyalty and spreading positive or negative experiences, it is important to research how satisfied are students from public, but also private faculties. According to that, in this paper two high education institutions within similar

It can be concluded that private Business School Libertas is better in all these segments of satisfaction and overall satisfaction than public Faculty of Economics and Business Zagreb. Regarding satisfaction with certain elements of the study – quality of teaching staff, non-teaching staff, environment and organization of the study, students from Faculty of Economics and Business Zagreb show dissatisfaction or neutral attitude, except for one element (decoration and functionality of library) with which students are satisfied, while students from High Business School Libertas show higher level of satisfaction. Analysis of overall satisfaction with the study shows that students from Faculty of Economics and Business are “neither satisfied nor dissatisfied”, while students from Libertas show higher level of satisfaction. This is not strange since, looking only at the quality of teaching staff which students ranked as the most important element that affects

their satisfaction, the highest mark at Faculty of Economics is actually lower than the lowest mark at Libertas.

Availability and the speed teaching staff's response via electronic media, as well as transparency and equal criteria of teaching staff towards students, are the most important factors which affect fulfillment of students' expectations and their satisfaction with the study at the EFZG, which means that Faculty of Economics and Business Zagreb should work on improving these factors, but also other aspects of teaching staff's quality as the most important element that affects students' satisfaction. The problem that arises is non-teaching staff or, more precisely, administration office working hours and unavailability and unkindness of its employees, because of which students emphasize that they would not recommend Faculty of Economics and Business to future students. Regarding High Business School Libertas, it is concluded that overall students' satisfaction is, beside teaching staff and modern technology in halls, mostly affected by availability of elective modules. This area is a space for Business School's improvement since students, except for mandatory modules, want to develop their knowledges and capabilities in specific areas of economics.

Limitations of research arise from the fact that only one institution from public and one from private sector of high education institutions have been analyzed and that future researches should include more public and private institutions. Also, the results of this study do not include all relevant student characteristics on the basis of which important socio-demographic differences can be identified, which may affect previous expectations and study satisfaction.

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CHALLENGES OF CIRCULAR ECONOMY IN CROATIA¹

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ABSTRACT

“Take-make-consume-dispose” approach or a linear model of economy is nowadays replaced with circular economy or “take-make-consume-take-make...” approach. Instead of throwing away circular economy recycles and reuses. The main idea is, as the nature returns everything back to the cycle, the economy also needs to have a closed loop in order to be sustainable. Two reasons lie behind this claim. First, the world population is increasing at growing rates and the scarce resources are to be exhausted. Second, linear economy leads towards environmental degradation that contributes to the climate change. Circular economy systematically changes the way the economy functions. The governments support use of renewable energy resources and waste management as well as discovery of new technologies. The goal of this paper is to assess the Croatian economy in the light of circular economy. Unlike the rest of the European Union which is considered the greenest region of the world, Croatia is lagging behind. The shift towards circular economy is yet to begin and this paper is considering the most important steps Croatia will have to make to accelerate the transition process.

KEY WORDS: circular economy, Croatia, waste management, renewable energy.

1. INTRODUCTION

As the standard of living rises, more and more different products are used. To produce these products, we need different materials from nature. However, planet Earth cannot keep pace with extensive utilization of scarce natural resources as the world population continues to grow along with their insatiability. Besides, in order to make these products fossil fuels are used. Also, large amounts of waste are thrown away after the consummation of a product. This means we have at least two big issues: the reduction in available resources due to population growth and climate change due to environmental deterioration.

The above described functioning mode is usually known as linear model of economy which relies on “take-make-consume-dispose” approach. Today it is becoming increasingly replaced with circular economy (CE) model focused on “take-make-consume-take-make...” approach. The goal is to achieve the economy with no waste i.e. an economic system where economics and environment are interlinked. So, instead of throwing away CE constantly recycles and reuses materials. In order not to exhaust

resources, the renewable energy is used. In opposition to open system, CE is closed, regenerative system in which everything is designed to be repaired, reused, reproduced, recycled etc. This makes CE a sustainable development² strategy.

CE systematically changes the way economy functions. And the change is mostly amended and implemented by the government who support the use of renewable energy resources and waste management as well as discovery of new “green” technologies. Since the concept of CE is new, many governments are yet to start their support and movement towards it. Some authors even call for a new economic model (see e.g. Persson, 2015) that will lead to resource saving and environment friendly society (Zhou, 2006). Due to high importance of this concept which is supported by many European Union (EU) documents³, this paper aims to give a practical contribution and policy recommendations and implications for Croatia which seemingly lags behind western EU economies.

The paper analyses how the concept of CE evolved and why it is an imperative for the sustainable development. The

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² The approach of sustainable development takes the Earth scarce resources into consideration. The point is to make a system that can work indefinitely without collapsing. This makes economics and environment inseparable entities.

³ Most of these documents can be found on European Commission site, available at: http://ec.europa.eu/environment/circular-economy/index_en.htm (accessed 13.07.2017.)

main contribution of this paper is threefold. First, we gave an assessment of CE concept development so far. Second, it contains the institutional framework for European Union and its member states showing where the countries that have aspirations of implementing the CE have to start and what adaptations are necessary to continue that path. Lastly, this is the first study which points to analysing challenges of CE concept implementation in Croatia. The most urgent challenge for the Croatia lies in waste management, which requires on radical changes – namely leaving behind old practises and focusing on separate waste collection. Much more needs to be done in the area of information provision and education on the local level.

The paper is structured as follows. Section 2 defines the concepts of CE and gives its theoretical specificity and highlights its practical importance. Regulatory framework presented in section 3 focuses on the European Union legislation and the key elements of a CE Package as it presents the legal framework for Croatia. In section 4 we analyse opportunities and challenges of CE in Croatia. Finally, section 5 concludes and presents some limitations and recommendations for future research as well as policy implications and recommendations for future improvement of CE.

2. THE ASSESSMENT OF CIRCULAR ECONOMY

The idea of CE comes from the nature where everything returns back to the cycle (take for example a tree and its blossoms that either create another tree or serve as a food through biodegradation). Accordingly, the economic system should also close a loop of used materials in order to be sustainable. The importance of closing the system was visionary emphasized by Boulding in 1966, who claimed that the closed system (earth) of the future will require different economic principles from those of the open system (earth) of the past (Boulding, 1966:7). The difference between these systems is that in a closed system, the outputs of all parts of the system are linked to the inputs of other parts (ibid:2). This is very exact description of CE. Su et al. (2013) note that CE concept itself has been first raised by Pearce & Turner (1990) who pointed that traditional economy treated environment as a waste reservoir. In line with Boulding (1966) their proposal focused on creation of a closed-loop of materials in the economy i.e. CE. Persson (2015) sees CE as “a way to face resource limitations through continuous circulation of materials, which could also foster economic growth decoupled from extraction of finite resource”. He states that CE is an industrial model where waste is designed out, the way things are produced is improved and products are designed to be easily recovered and recycled (ibid:5). It is generally believed that circular model no longer represents “business as usual”.

The key methods in CE are “reduce, reuse and recycle” or the 3Rs. Reducing refers to minimizing inputs of materials and energy in production process (supply) and minimizing

consumers’ consumption (demand). Reusing means that someone’s waste is someone else’s raw material. This opportunity has to be encouraged along with the production of convenient materials that can be reused. Recycling encourages transformation of used materials for a production of new products. In that sense the eco-design directives should be promoted as to improve recyclability. According to Heshmati (2015:3) the CE in practice resonates with the concept of industrial ecology which aims at benefits exploration of reusing and recycling residual waste materials including energy, water, different byproducts as well as knowledge.

McDonough & Braungart (2002) argue that the above mentioned concept of reducing, reusing and recycling is still a ‘cradle-to-grave’ principle that only minimizes damage and therefore is not good enough to accomplish circular and sustainable economy. The authors suggest that ‘cradle-to-cradle’ strategy needs more radical change. Authors analyze two alternative concepts: downcycling and upcycling. The first corresponds with recycling materials in order to make new lower-value products than the original ones. The latter is in correspondence with the notion that the recycling process should add new value to the recycled materials or items. The idea goes further and assumes that the use of such inputs can be converted either to biological (non-toxic materials good for nature e.g. food products that can decompose) or technical (materials that can be recycled e.g. metals or minerals) nutrients at the end of their lifecycle (for a detailed explanation see e.g. Ellen MacArthur Foundation (EMF), 2012 or EMF, 2013). Therefore, the upcycling concept is preferable to the downcycling concept.⁴ But to make this concept a reality, for the purpose of retaining the materials in a closed loop, the manufacturing process needs to be changed radically. Thus ‘cradle-to-cradle’ concept expanded the CE concept. Another important concept that supported the development of CE concept is ‘biomimicry’ – an approach focused on innovation which seeks for sustainable solutions “by emulating nature’s time-tested patterns and strategies. The goal is to create products, processes, and policies - new ways of living - that are well-adapted to life on earth over the long haul.” (Biomimicry institute, 2017). European Commission (EC) took the similar approach to this expanded concept of CE. As it can be seen from EU documents, European Union promotes the idea that CE has to go beyond the pursuit of waste prevention and waste reduction and inspire “technological, organizational, and social innovation throughout the value chain in order to ‘design-out’ waste from the beginning, rather than relying solely on waste recycling at the end of the chain” (EC, 2014b:3). In addition, the cooperation between all phases of industrial production to recycling in the form of industrial symbiosis is desirable (Bastein et al., 2013).

As many concepts of CE exist so do their own visualizations. On Figure 1 we represent a European Environment Agency’s (EEA, 2016) simplified model. The 3R principles (“reduce, reuse and recycle”) are at the core of the model. The basic idea is to reduce waste generation and material inputs through

⁴ There is also the concept of precycling that refers to avoiding the use of materials that cannot be recycled.

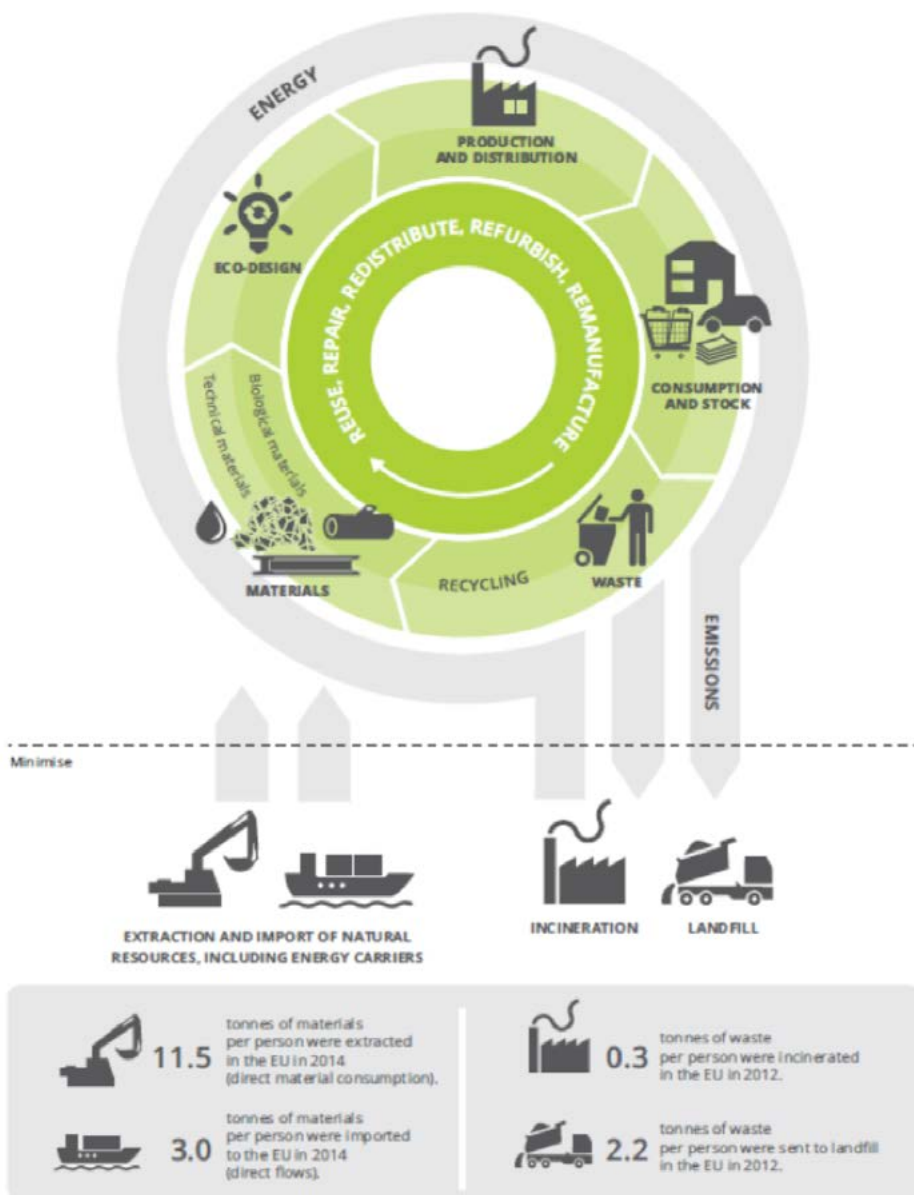
eco-design, recycling and reusing of products. The outer circle represents the overall energy flows. First, total energy efficiency and the share of renewables should both increase. The implications for incineration are not straightforward as energy recovered through it can partly compensate for (fossil) fuel use; but again, the energy from incineration can be used only once and thus removes materials from the loop. The landfills should be exterminated. In parallel with reduced dependency on extraction of materials and imports the reduction in the emissions to the environment declines.

The middle circle represents the material flows in the recycling loop starting with eco-design and finishing with

abiotic technical or biological nutrients. As the biological materials are truly renewable it is beneficial if their share would increase whereas technical materials are not so their share should fall. In practice, both materials are often mixed, which has implications for biodegradability and recyclability (ibid:9).

Finally, the inner circle requires minimal resource input as reusing, repairing, redistribution, refurbishment and remanufacturing bypass waste generation and recycling. This 5R's retain the value of products, components and materials at the highest possible level (ibid:9-10).

Figure 1. A simplified model of the CE for materials and energy



Source: EEA, 2016:10

Over the past six decades, ever since the Boulding writings, the concept of CE is evolving. Along with its development containing somewhat different and sometimes even contrasting view of economy and world (with even some caring only about nature and not at all about the economy, e.g. many ecologists) the definition of CE was missed.

Accordingly, at the beginning stage of development of new CE paradigm (solid-) waste management was the first step in solving environmental and resources problems. Later it became a whole new model for sustainable economy including whole product lifecycle from production (starting with eco-design) to consumption. Therefore,

in order to make a transition to CE, all economic agents have to collaborate: public (including policy makers) and private sector (especially researchers) along with civil society. This is possible if all of them have a common goal – the introduction of CE – that will make the economy and society better and sustainable. The final positive effects of CE should be sought in four different areas: (1) *resources* as CE conserves materials and recycles them making a country less dependent on imports. Current estimates show that 6–12 % of all material consumption, including fossil fuels, is currently being avoided as a result of recycling (Dodick & Kauffman, 2017:4); (2) *economics* as the competitiveness and innovation should rise through the resource efficiency/cost savings. Also, sources of economic growth would change in the CE. Physical goods will no longer be the main driver of growth but the amount of services consumed; (3) *environment* as the nature is preserved. Ellen MacArthur Foundation & McKinsey Center for Business and Environment (2015) estimate a CO₂ emissions drop of 48 % by 2030 and 83 % by 2050, compared with 2012 levels; (4) *society* as it should improve people's overall well-being. It is expected that sharing, eco-design, reusing and recycling result in more sustainable consumer behavior, while contributing to human health (Dodick & Kauffman, 2017). Also, CE is expected to create job opportunities. According to the European Commission's impact assessment policies towards CE, it could result in the creation of up to 178 thousand new jobs by 2030 (EEA, 2016). Nevertheless it is important to note that in the transition processes towards CE benefits will not be evenly distributed and there will be some losers (e.g. jobs in low-quality consumer goods industries could be lost).

In moving towards CE, governments considered not only waste management policies but also policies oriented towards energy efficiency, energy conservation, water management, land management etc. The first country which introduced CE law was Germany in 1996⁵, the second was Japan in 2000⁶ and the third was China in 2003⁷. Today many economies strive to introduce the concept of CE. Along with these trends many studies are carried in order to assess the improvements brought by CE concept implementation. Persson (2015) analyses how the Swedish public sector employees perceive introduced CE projects and concludes that the general notion is highly positive. Jackson et al. (2014) proposes practical tools and methods which should be used in the transition of the Australian metals sector towards a CE model. Similar analysis is performed for the Netherlands (Bastein et al., 2013) with the conclusion that clear and consistent communication across governmental departments is crucial for CE concepts' success. Authors also stressed out that then the transition to a CE will be beneficial for all. Guldman (2016) presents best practical examples of circular business models in Denmark. She finds that many of the examined companies apply a step-by-step or experimental strategy,

where they test the resilience of a circular business model within a limited number of product lines or in one business unit at a time.

European Union enacted common environmental and energy policy that includes environmental policies and covers all aspects from production to consumption and waste management. Those policies often do not refer to CE concept – but the purposed patterns are very similar or even the same. Additionally, lately European Commission calls for a support and movement towards a CE in many documents (EC, 2012, 2014a, 2014b). One example is European Commission's adoption of legislative package in 2015 dealing with CE which is, along with few other documents, described in the next section (EC, 2017).

In countries like China and Japan problems of high air pollution as well as environmental degradation and resource scarcity have led efforts towards establishment of a CE. Geng & Doberstein (2008a & 2008b) describe measures being implemented in China for the long-term promotion of a CE (including objectives, legislation and policies) and also analyse current barriers and problems in promoting green procurement in the Chinese governmental sector. They emphasize that policies concerning CE have to be simultaneous at micro, mezzo and macro levels. According to Heshmati (2015) China is the only country that practices CE as a development strategy on a large scale. He concludes there is more to do, but the progress is apparent. On the contrary, Japan is a country where CE legislative experience is mixed. Davis & Hall (2006) state that many Japanese laws concerning CE are not matching Japan's cultural norms and therefore the results are not promising.

To conclude, achieving CE concept goals will not be easy. Ellen MacArthur Foundation provides evidence that circularity has started to make inroads into the linear economy and has moved beyond proof of concept. China is an example of positive effects circularity brings. Europe is driving fast towards it. But not only governments strive to establish CE but many companies (e.g. Ricoh, Philips, H&M, Trina Solar, and Vodafone) also use different forms of circular arbitrage and capture more value over time (EMF, 2014). Hopefully, the good examples will continue to appear.

3. REGULATORY FRAMEWORK FOR CIRCULAR ECONOMY IN THE EUROPEAN UNION

The concept of CE is closely linked to the United Nations (UN) sustainable development goals (SDGs) adopted in 2015, especially those that stimulate action to “protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate

⁵ Available at: <https://germanlawarchive.iuscomp.org/?p=303> (accessed 12.07.2017.)

⁶ Available at: <http://www.env.go.jp/recycle/low-e.html> (accessed 12.07.2017.)

⁷ Available at: <https://www.ecolex.org/details/legislation/cleaner-production-promotion-law-lex-faoc046926/> (accessed 12.07.2017.)

change, so that it can support the needs of the present and future generations” (UN, 2015). The EU contributed to shaping SDGs that balance economic, social and environmental dimensions of sustainable development, and it strives to be a frontrunner in implementing the UN 2030 Agenda and its goals. The principles of sustainable development are included into EU policies and legislation through the EU Sustainable Development Strategy 2001, the EU 2020 Strategy 2010, and the EU’s Better Regulation Agenda 2015. The sustainable growth is put forward as one of three priorities in Europe 2020 strategy emphasizing the need to “promote a more resource efficient, greener and more competitive economy” (EC, 2010).

The rapid environmental deterioration around the world has led to the development of policies for reducing the negative impacts of production and consumption on the environment (Heshmati, 2015:2) leading to transition to a different economic model. As it is already mentioned, Germany acted as a pioneer and implemented CE in 1996 when the “Closed Substance Cycle Waste Management Act”⁸ came into force. This Act is considered the most significant element of German CE legislation and its principal innovation was creating a framework for the imposition of “Extended Producer Responsibility” to avoid generation of waste by building a life-cycle economy (Davis & Hall, 2006). In 2012, the “Circular Economy Act”⁹ implementing the EU Waste Framework Directive came into force and clearly stated Germany’s dedication to promote ecologically sound waste management and a CE protecting natural resources (Bourguignon, 2014:6). France developed a strategy and a roadmap for the CE transition in 2013, and the UK also initiated transition process by developing an initiative on CE (WRAP), supporting waste reduction and improving resource efficiency (Bourguignon, 2014:7). Reducing waste to a minimum is the first step in

CE, but policies must go beyond waste management to achieve sustainable production and consumption (EEA, 2015:152).

In order to overcome the limitations of a linear economy and heavy dependence on imported raw materials, the European Commission launched Circular Economy Package in December 2015. The Package includes an EU action plan for the CE with its annex and four legislative proposals on waste policy¹⁰. Besides Circular Economy Action plan, several other EU policies are also directed at the CE, including the environment policies, energy and climate policies, the Digital Single Market and the Collaborative Economy (Taranic et al., 2016:11). According to European Commission, although waste management is only one part of CE, it plays a leading role and determines how the EU waste hierarchy is put into practice (EC, 2015a:8). The legislative proposals revised six EU Directives on waste management to facilitate implementation and address differences across EU member states. The average recycling rate of waste produced by EU households is only 40 % with strong variations between member states (MS) and regions. The recycling rates are as high as 80 % in some areas, and even lower than 5 % in others (EC, 2015a:8) indicating that the member states have different starting positions regarding the adopted waste targets. The member states with the biggest implementation challenge are allowed to use time extensions of maximum 5 years to meet the proposed targets (EC, 2015b:3).

The revised waste proposals contain new targets and additional means to ensure their proper implementation (Table 1.) providing stable framework for waste management in the EU based on a long-term vision (EC, 2015b:3).

Table 1. Key elements of the revised proposals on waste management in the EU

Recycling and reuse	Landfilling
A common EU target for recycling 65 % of municipal waste and recycling 75 % of packaging waste by 2030.	A binding landfill target to reduce landfill to maximum of 10 % of municipal waste by 2030.
Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU.	A ban on landfilling of separately collected waste (except for certain hazardous waste and residual waste).
Concrete measures to promote re-use and stimulate industrial symbiosis (turning one industry’s by-product into another industry’s raw material).	Promotion of economic instruments to discourage landfilling (charges on landfilling).
Economic incentives for producers to put greener products on the market and support recovery and recycling schemes (e.g. for packaging, batteries, electric and electronic equipment, vehicles).	

Source: http://ec.europa.eu/environment/waste/target_review.htm, EC (2015b:3)

⁸ In 1991, the German Cabinet approved the “Ordinance on the Avoidance of Packaging Waste” (VERPACKVO), which was supplemented and expanded three years later by the “Closed Substance Cycle Waste Management Act” (KrW-/AbfG) (Davis & Hall, 2006) now considered the most significant element of German circular economy legislation.

⁹ Available at: <http://www.gesetze-im-internet.de/bundesrecht/krwg/gesamt.pdf> (accessed 15.08.2017.)

¹⁰ The four proposals to amend 1) Directive 2008/98/EC on waste, 2) Directive 94/62/EC on packaging and packaging waste, 3) Directive 1999/31/EC on the landfill of waste, 4) Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators and 2012/19/EU on waste electrical and electronic equipment form part of a Circular Economy Package which also includes a Commission Communication “Closing the loop – An EU action plan for the Circular Economy”.

Besides these key elements described in Table 1, the waste policy proposals also set minimum requirements for extended producer responsibility (EPR) schemes, aligned definitions, calculation methods for targets, reporting obligations and provisions on delegated and implementing acts (Bourguignon, 2016:5). In order to monitor progress towards a CE the Commission and the European Environment Agency provided a modelling tool for the management of municipal waste to be used within the early warning system. A reference modelling tool has been developed to regularly assess the distance to target in all MS, analyse ex-ante expected progress in terms of waste management and identify member states at risk of not meeting the target (EC 2015b:6).

Apart from waste management and a monitoring framework, the EU action plan covers several other major aspects for transition to CE including production, consumption, markets for secondary raw materials and innovation. Regarding production, the Commission puts emphasis on improving product design by promoting the reparability, durability and possibilities for upgrading and recycling of products through the Ecodesign Directive¹¹ and extended producer responsibility schemes (Bourguignon, 2016:5). The ecodesign¹² refers to the integration of environmental aspects into product design with the aim of improving the environmental performance of the product along its life-cycle from raw material use to final disposal (EC, 2009). In the future, the Ecodesign directive should achieve even more significant contribution to the CE, by extending its focus from energy efficiency improvements to material efficiency issues such as durability and recyclability (EC, 2016a:3). Extended producer responsibility implies that producers take financial or organisational responsibility for collecting or taking back used goods and for sorting and treating them for eventual recycling (EEA, 2017:23). Differentiating the financial contribution paid by producers under EPR schemes on the basis of the end-of-life costs of their products should stimulate design of products that are easier to recycle or reuse (EC, 2015a). The policy attention in the EU has mostly been directed towards improving material and energy efficiency as well as recycling of different types of waste, with less attention given to reuse, repair, redistribution, remanufacture and refurbishment, resulting in recent development of the strategies introducing these concepts (EEA, 2017:10). The Commission also intends to facilitate industrial symbiosis (e.g. one company's raw materials are waste from another company) in order to reduce environmental impacts and to create business opportunities, especially for SMEs (Bourguignon, 2016:5).

Raising the consumers' awareness on sustainability of consumption and ensuring trustworthy information about the properties of available products (e.g. improved labelling system) especially their environmental impact can support the CE via choices consumers make. The consumers choices are also influenced by the range and prices of existing products and the regulatory framework aimed at preventing and reducing the generation of household waste (EC, 2015a:7). Since price is the key factor influencing consumer behaviour, the Commission proposes the use of incentives and economic instruments like higher taxation for products that incur higher environmental costs and the use of "pay-as-you-throw schemes" for municipalities where households pay according to the amount of non-recyclable waste that they throw away. The Commission also promotes innovative forms of consumption that can foster the development of the CE, such as sharing products or infrastructure, consuming services rather than products, or using IT or digital platforms. Collaborative consumption¹³ or sharing economy is an important aspect of consumer behaviour contributing to a CE under the assumption that shared use of assets leads to an increasing utilisation of existing products and a lower demand for new products (EEA, 2017:22). The European public consumption is also directed towards CE through Green Public Procurement (GPP) by emphasising CE aspects in new or revised criteria, such as durability and reparability, and supporting higher use of GPP especially through Commission's own procurement and EU funding (EC, 2015a:8).

The development of market for secondary raw materials is crucial for the transition to CE because recyclable materials are fed back into the economy as new raw materials that can be traded just like primary raw materials (EC, 2015a:11). Injecting materials back into the economy and avoiding waste being sent to landfill or incinerated enables capturing the value of the materials as far as possible, reducing losses (EEA, 2016:29), increasing the supply of materials, and consequently decreasing the dependence on imported raw materials. However, a considerable amount of raw materials originating from waste leaves Europe¹⁴ and does not contribute to increasing circularity of the European economy (EC, 2016b:76). In order to prevent illegal transport of waste and raw materials leakage, a revised regulation on waste shipment was adopted in 2014¹⁵ specifically targeting high-value waste streams, such as end-of-life vehicles (EC, 2015a:10). According to Raw Materials Scoreboard¹⁶ (EIP, 2016:66) 16 % of raw materials used in the EU in 2005 were imported, only 13 % came from recycling and more

¹¹ Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products, OJ L 285, 31.10.2009, pp. 10-35.

¹² The EU Ecodesign Directive and the Waste Electrical and Electronic Equipment (WEEE) Directive are the most important EU legislative documents on eco-design in products, promoting increased energy efficiency during the use phase (O'Brien et al., 2014:17).

¹³ In order to facilitate the application of national legislation on taxation and social protection to collaborative consumption activities, the Commission has published good practices and guidance on applying existing EU rules to the collaborative economy especially through a European agenda for the collaborative economy (EEA, 2017:22).

¹⁴ The export of iron and steel waste and copper, aluminium and nickel increased substantially between 1999 and 2011 (EEA, 2012).

¹⁵ Regulation (EU) No 660/2014 of the European Parliament and of the Council of 15 May 2014 amending Regulation (EC) No 1013/2006 on shipments of waste.

¹⁶ The Raw Materials Scoreboard is an initiative of European Innovation Partnerships (EIP) on Raw Materials. EIP is a stakeholder platform with a mission to provide guidance to the European Commission, Member States and private actors on innovative approaches to the challenges related to raw materials (<https://ec.europa.eu/growth/tools-databases/eip-raw-materials/>).

than 70 % originated from domestic extraction. Moreover, only 41 % (1 billion tonnes) out of 2.4 billion tonnes of end-of-life waste was recycled indicating that the circular use of raw materials in the EU economy is still relatively low but slightly higher than the global average. In the EU action plan the Commission is committed to promote development of market for secondary raw materials through several actions, especially by developing EU-wide quality standards to increase trust in secondary raw materials and in recycled materials. Furthermore, it will facilitate the safe reuse of treated wastewater (including legislation on minimum requirements for reused water), encourage nutrient recycling in fertilisers (by proposing a revised EU regulation on fertilisers) and promote non-toxic recycling cycles (Bourguignon, 2016:6; EC, 2015a:13).

Redesigning materials and products for circular use could trigger a large innovation drive across sectors (Bourguignon, 2016:4) that could boost competitiveness of the EU economy. The impact of innovation in linear system mechanism differs substantially from its role in the circular system mechanism. As EEA (2017:14) describes, in the linear economy technological innovation makes old products obsolete and urges consumers to buy new products which are hard to repair due to protective design measures. In the CE, the creation of value shifts from product to the performance or functionality by applying technological innovation to provide product longevity, reuse, reparability and remanufacturing. Innovation is at the very heart of transition to the CE because new technologies, processes, services and business models are needed to rethink our ways of producing and consuming, and to transform waste into high value-added products (EC, 2015a:18). Social innovation, eco-innovation and ecodesign are especially important in terms of achieving sustainability. Collaborative consumption and prosumerism both serve as examples of social innovation, while eco-innovation goes beyond technical innovation (EEA, 2015:163) and presents “any innovation that reduces the use of natural resources and decreases the release of harmful substances across the whole life-cycle” (EIO, 2010:10). Considering that Small and Medium-sized Enterprises (SMEs) are particularly active in fields such as recycling, repairing and innovation, the Commission supports these companies by analysing the barriers to a more efficient use of resources and waste management, encouraging innovation and cooperation across sectors and

regions, and providing sources of funding (EC, 2015a:19). As announced in the EU action plan, the Commission introduced a non-legislative approach of “Innovation Deals” to help innovators overcome perceived regulatory obstacles by setting up agreements with stakeholders and public authorities¹⁷. A policy portfolio that provides a protected innovation space for innovators, especially via dedicated funding opportunities, is necessary to share risks of entrepreneurial discovery processes and to support the CE transition (O’Brien et al., 2014:6). Horizon 2020¹⁸ is EU’s Framework Programme for Research and Innovation that fosters innovative projects relevant to the CE in fields such as waste prevention and management, food waste, remanufacturing, sustainable process industry, industrial symbiosis, and the bioeconomy (EC, 2015a:18)¹⁹. Financial support is also foreseen from other EU funding programmes such as LIFE²⁰, COSME²¹, EaSI²², Cohesion Policy Funds, the European Structural and Investment Funds (ESIF) and the European Fund for Strategic Investments (EFSI).

The transition towards a CE is a challenging process requiring actions at many levels (e.g. European, national, local, business, individual) and in many policy areas (e.g. waste management, professional training for developing specific skills, packages and product design, research and development, and finance) including taxation (e.g. shifting from labour towards pollution and resources) (Bourguignon, 2014). Monitoring progress towards CE includes building on existing indicators, ensuring reliability of data, and developing new indicators for better assessment of member states performance (EC, 2015a:21). Several scoreboards, containing indicators at EU-28 and country level, have already been developed like Resource Efficiency Scoreboard²³, Raw Materials Scoreboard²⁴ and Eco-innovation Scoreboard²⁵ to assess and illustrate performance across EU countries. Member states should ensure sufficient resources at all government levels for the monitoring and reporting on waste management policies, develop electronic waste registries, and set up training for local/regional authorities and relevant stakeholders (EC 2015b:8). Five years after launching action plan to promote the CE, the Commission will report on its implementation (EC, 2015a:21).

¹⁷ The first Innovation Deal was signed in April 2017 with a focus on an existing regulatory framework affecting water reuse for agricultural purposes (<http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2017&na=na-070417>).

¹⁸ The Horizon 2020 Work Programme for 2016-2017 provides funding of over €650 million for initiative ‘Industry 2020 in the circular economy’ (EC, 2015a:19).

¹⁹ The SME Instrument under Horizon 2020 supports exploring the feasibility and the commercial potential of highly eco-innovative ideas in order to develop new businesses for SMEs (EC, 2014c:6).

²⁰ EU’s financial instrument supporting environmental, nature conservation and climate action projects throughout the EU (<http://ec.europa.eu/environment/life/>).

²¹ EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises running from 2014 - 2020 with a planned budget of EUR 2.3 billion (https://ec.europa.eu/growth/smes/cosme_en).

²² EU programme for Employment and Social Innovation (<http://ec.europa.eu/social/main.jsp?catId=1081>).

²³ <http://ec.europa.eu/eurostat/web/europe-2020-indicators/resource-efficient-europe>

²⁴ http://ec.europa.eu/growth/content/raw-materials-scoreboard_en

²⁵ <https://ec.europa.eu/environment/ecoap/scoreboard>

4. CIRCULAR ECONOMY IN CROATIA – CHALLENGES AND OPPORTUNITIES

It is generally believed that first step towards CE should be to adopt new rhetoric including CE benefits (i.e. CE is positive for every agent), the notion that waste is a resource and that systematic change is needed in order to have a sustainable economy and society. The next stage is to adopt laws promoting CE. Most of the promotional activities in these stages should be done within governments. Final stages include all economic agents as it is described earlier. It is known that most of EU laws refer to its member states including Croatia. But to further build a CE in Croatia, there has to be a political will within a country to overcome many challenges. First obstacle is poor leadership and management and poor enforceability of legislation along with weak economic incentives. Many new policies including economic incentives will be necessary to overcome these challenges. Next is lack of public awareness about relationship between mankind and nature. Population of Croatia has to realize this relationship is crucial in order to ensure sustainable development. Other challenges include: lack of reliable information and shortage of advanced technology (Su et al., 2013:18).

So far, the most relevant policies for the development of CE in Croatia include (1) Sustainable Development Strategy of 2009; (2) Strategical plan of Ministry of Environment and Nature Protection 2015-2017 ; (3) National

renewable energy action plan until 2020; (4) Strategy for innovation encouragement of the Republic of Croatia 2014-2020; (5) Third national plan for energy efficiency 2014-2016; (6) Waste management plan of the Republic of Croatia for the period 2017-2022 (2017); (7) Smart specialisation strategy of the Republic of Croatia for the period from 2016 to 2020 and; (8) Action plan for the implementation of the Smart specialisation strategy of the Republic of Croatia in the period from 2016 to 2017 (2016). The European directives on the CE are currently in the phase of implementation in Croatian legislation. The adoption of action plans is also in progress.

The indicators measuring progress towards CE are very important. Despite numerous laws, the problem of performance assessment is general illness of the CE. There is a lack of common metric indicators that would assess the effectiveness of various policy instruments. Also, the heterogeneity of firms, industries and regions have implied that different sets of assessment indicators need to be simultaneously developed (Heshmati, 2015). However there are some indicators. Heretofore the EU developed a set of different indicators under the Resource efficiency scoreboard²⁶. European Academies' Science Advisory Council (EASAC) finds that many indicators relevant for the CE are available (EASAC, 2016). These indicators will help EU and member states for monitoring the achievement of CE. Selected indicators in Table 2 are the most important for progress measurement towards CE based on EASAC report and Resource efficiency scoreboard²⁷.

Table 2. Selected indicators measuring progress towards CE

Indicator	Explanation
Resource productivity ²⁸	Gross domestic product (GDP) divided by domestic material consumption (DMC – total amount of materials directly used by an economy)
Eco-innovation index	Index based on 16 indicators from eight contributors in five areas: eco-innovation inputs, eco-innovation activities, eco-innovation outputs, environmental outcomes and socio-economic outcomes ²⁹ . The overall score of an EU member state is calculated by the unweighted mean of the 16 sub-indicators. It shows how well individual MS perform in eco-innovation compared to the EU average, which is equated with 100.
Recycling rate ³⁰	The recycling rate is the tonnage recycled from municipal waste divided by the total municipal waste arising.
Municipal waste per capita	The amount of municipal waste generated (consists of household and similar waste collected by or on behalf of municipal authorities) divided by annual average population.

Source: based on EASAC (2016) and Resource Efficiency Scoreboard³¹

²⁶ The Resource Efficiency Scoreboard presents indicators covering themes and subthemes of the Roadmap to a Resource Efficient Europe. The EU Resource Efficiency Scoreboard indicators illustrate the progress towards increased resource efficiency of individual member states and the European Union as a whole. (<http://ec.europa.eu/eurostat/web/europe-2020-indicators/resource-efficient-europe>)

²⁷ http://ec.europa.eu/environment/resource_efficiency/targets_indicators/scoreboard/index_en.htm

²⁸ Resource productivity may be expressed in euro per kilogram using current price data for GDP, which could be used when analysing a single economy for one particular year or in PPS (purchasing power standards) per kilogram using current price data for GDP expressed in purchasing power standards (PPS) (Eurostat).

²⁹ Eco-innovation inputs comprising investments (financial or human resources), which aim at triggering eco-innovation activities; Eco-innovation activities, illustrating to what extent companies in a specific country are active in eco-innovation; Eco-innovation outputs, quantifying the outputs of eco-innovation activities in terms of patents, academic literature and media contributions; Resource efficiency outcomes, putting eco-innovation performance in the context of a country's resource (material, energy, water) efficiency and GHG emission intensity; Socio-economic outcomes, illustrating to what extent eco-innovation performance generates positive outcomes for social aspects (employment) and economic aspects (turnover, exports) (EU Eco-Innovation Index 2016).

³⁰ Recycling includes material recycling, composting and anaerobic digestion. Municipal waste consists to a large extent of waste generated by households, but may also include similar wastes (Eurostat).

³¹ http://ec.europa.eu/environment/resource_efficiency/targets_indicators/scoreboard/index_en.htm

The first indicator is Resource productivity (Table 3). Resource productivity in the EU-28 increased by 41 % between 2000 and 2016. The maximum increase was achieved in Ireland, 131 %, and maximum decrease was in Romania, -35 %.

Table 3. Resource productivity (GDP divided by domestic material consumption)

Country	2000	2005	2010	2015	2016
EU 28	1.4702(s)	1.5441(s)	1.7676(s)	2.0189 (ps)	2.0728(ps)
Croatia	1.0509(s)	0.7983	1.0088	1.0783	1.0768(ps)

s=Eurostat estimate (phased out); p=provisional

Source: Eurostat³²

After the economic crisis in 2008 the significant increase in resource productivity (30.6 %) was caused mostly by a 19.7 % fall of domestic material consumption (DMC) in the same period. Between 2000 and 2016 resource productivity in Croatia increased only by 2.5%. Expressed in GDP in PPS over DMC, the resource productivity amounts to 2.23 PPS/kg for the EU-28 and 1.7 PPS/kg for Croatia in 2016. Croatian index is about 25 % lower than EU index. The ratio varies considerably across EU member states from 0.68 €/kg in Bulgaria to 3.98 €/kg in Italy³³.

The second indicator is Eco-innovation index (Table 4). The eco-innovation index shows how well individual member state performs in eco-innovation compared with the EU average (EU=100). Croatia has achieved an index 19 % (81) lower than the EU average³⁴ (2015 index was 33 % lower and 2013 44 % below the EU average)³⁵. Croatia has significantly improved its eco-index last few years but is still among nine least eco-innovative countries in EU (countries catching up in eco-innovation)³⁶. In 2016 Germany is top ranked of all EU countries, with an aggregated score of 140. Luxembourg (score of 139) and Finland (137) follow Germany very closely. According to the eco-innovation index Bulgaria (41) and Hungary (60) have the worst results.

Table 4. Eco-innovation index

Index (EU 28=100)	2013	2014	2015	2016
Croatia	56	93	61	81

Source: Eurostat³⁷

Waste generated in kilograms per capita is next indicator (Table 5). The EU generated 476 kg of waste per person in 2015³⁸ of which 45% was either recycled or composted, according to Eurostat data. EU waste generation was 10% lower than at its peak of 527 kg per person in 2002. Croatia generated 393 kg of waste per person in 2015 (18 % below EU average) and recycled 18% of its waste. It is 2 % more waste per person compared to 2006. When observing the quantities of produced municipal waste with regards to the origin (county), a disproportion between "continental" and "coastal" counties can be noted, mostly due to the effect of tourism. The quantity of municipal waste from tourism in 2015 was 98,960 tonnes, constituting 6% of the total quantities of municipal waste. The largest quantities of municipal waste from tourism are produced in the county of Istria, the county of Primorje-Gorski Kotar and the county of Split-Dalmatia³⁹.

Table 5. Waste generated in kilograms per capita

Country	2006	2007	2008	2009	2010
EU 28	522	524	521	511	504
Croatia	384	399	415	405	379
Country	2011	2012	2013	2014	2015
EU 28	498	485	478	477	476
Croatia	384	391	404	387	393

Source: Eurostat

The last analysed indicator is Recycling rate of municipal waste (Table 6). Recycling rate of municipal waste in the EU has increased over time, from 35% in 2007 to 45% in 2015. The most successful EU member state is Germany with the recycling rate of 55 %, while the lowest recycling rate have Malta (6.7 %) and Romania (13.1 %). Recycling rate of municipal waste in Croatia was about 6 times higher in 2016 compared to 2007 (3.1 %).⁴⁰ It is very low municipal recycling rate and much progress will be required to meet the 65 % recycled municipal waste target by 2030 according to European Commission's revised legislative proposals on waste. The best waste management (CE) results at the municipal level are realized by the island Krk on the Adriatic Sea (54.2 % was recycled in 2016 compared to 18.2 % in 2006⁴¹) and the town Prelog in the continental part of

³² <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=tsdpc100>

³³ http://ec.europa.eu/eurostat/statistics-explained/index.php/Resource_productivity_statistics

³⁴ Scores in the five components of the Eco-Innovation Index: Eco-innovation inputs=15, eco-innovation activities=89, eco-innovation outputs=100, environmental outcomes=104 and socio-economic outcomes=100 (https://ec.europa.eu/environment/ecoap/sites/ecoap_stayconnected/files/eio_brief_eco-innovation_index_2016_final.pdf)

³⁵ http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=t2020_rt200&plugin=1

³⁶ Countries catching up in eco-innovation (EI), with around 85 % or less performance compared to the EU average (EU Eco-Innovation Index 2016, EIO Brief, April 2017), https://ec.europa.eu/environment/ecoap/sites/ecoap_stayconnected/files/eio_brief_eco-innovation_index_2016_final.pdf

³⁷ http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=t2020_rt200

³⁸ <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tsdpc240&plugin=1>

³⁹ http://www.mzoip.hr/doc/management_plan_of_the_republic_of_croatia_for_the_period_2017-2022.pdf

⁴⁰ http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=t2020_rt120&language=en

⁴¹ <http://www.grad-krk.hr/www.grad-krk.hr/files/Of/Ofe995e9-1756-4f1c-8d63-9b3883b5308f.pdf>

Croatia (53.12 % was recycled 2016 compared to 16.9 % in 2011⁴²). Municipal waste recovery rate in the capital city of Croatia – Zagreb was as low as 22.2 % in 2015. The highest rate has county Međimurje (38 %) and the lowest rate has county Karlovac (11.5).⁴³

Table 6. Recycling rate of municipal waste (%)

Country	2007	2008	2009	2010	2011
EU 28	35(s)	36.5(s)	37.5(s)	38.3	39.6(s)
Croatia	3.1	2.8	2.3	4	8.3
Country	2012	2013	2014	2015	
EU 28	41.5(s)	42.2(s)	43.7(s)	45(s)	
Croatia	14.7	14.9	16.5	18	

s=Eurostat estimate (phased out)

Source: Eurostat⁴⁴

The indicators measuring progress towards CE show that much progress would be required to meet set EU goals. But, the bright side can be seen in examples of several companies that show the concept of CE can become the path to development in Croatia which will create new jobs, raise competitiveness and generate profits. One of the rare examples of the company taking the CE approach is Stražaplastika which annually produces about 4000 tons of plastic of which 1000 tons are recycled. Unfortunately, these are imported because required quantities cannot be purchased in the Republic of Croatia. Croatia unclassified plastic waste export to Austria where Austrian companies then manually or mechanically sort and sell it to Stražaplastika Company at a higher price.⁴⁵ The question is why sorting is not done in Croatia? Also a good example of CE is the company Holcim which has been using the byproduct from Plomin Thermal Power Plant in the cement plant in Koromacno⁴⁶. There are also other companies with examples of the CE like Tehnix, Regeneration, Agrokork farms or Solin's recycling centre for hotel soap.

According to Eco-Innovation Observatory (EIO Country Profile 2014-2015) the following circumstances are identified as a key barrier towards a CE in Croatia: (1) Current Croatian regulatory framework is not yet fully compliant with the EU regulation; (2) Most of the national strategies which serve as the legal framework for the creation of laws and regulations have not been updated and are not in compliance with the goals of circular economy and; (3) The process of development of some strategic documents has been relatively slow which has had a negative impact on the state of the overall regulatory framework. Another important issue lies in the failed implementation of

laws and regulations, particularly in the field of waste management. The cause of the problem is the absence of political action to guarantee the enforcement of fines for breaking the law.

Based on EIO Croatian Country Profile the biggest and the most urgent challenge for Croatia lies in the waste management. It requires a radical change – namely leaving behind old practices and focusing on separate waste collection. Much more needs to be done in the area of information provision and education on the local level. One step towards more efficient innovation system was the Strategy for Innovation encouragement of Croatia 2014-2020 which defines the mechanisms for stimulating innovation and application of new technologies.⁴⁷

Introducing rightly chosen and designed policy measures is essential for moving Croatia from linear to a CE model. The GreenXpo paper on Circular Economy Policy Guidance⁴⁸ presents five categories of policy measures (or supportive framework conditions) with examples for each policy measure to build CE:

(1) *Regulatory instruments* with regarding policies: a) Regulations e.g. on waste recycling, extended producers responsibility, ecodesign, take-back, transparency in material chain and responsibilities. etc.; b) Quality and other mandatory targets e.g. waste recycling. re-use; c) Codes, standards, certification for products, recycled material content, packaging, emissions, as well as the ones triggering innovation prior to setting new minimum performance limits;

(2) *Economic instruments* with regarding policies: a) Fiscal/ financial instruments and incentives including charges and taxes for waste, incineration, landfill, subsidies and tax reliefs, pay as you throw; b) Direct investment/ funding e.g. infrastructure, programme etc.; c) Demand pull instruments including public procurement; d) Market based instruments.

(3) *Research, development and deployment* with regarding policies: a) Funding for R&D in CE related themes e.g. direct or competitive grants; b) Pre-commercial /R&D procurement for products and services with sustainable design; c) Providing R&D infrastructure; d) Innovation vouchers schemes for SME on CE related innovations; e) Support to innovation incubators focusing on CE related areas; f) Support programmes and incentives for R&D personnel.

(4) *Information, capacity building and networking support* with regarding policies: a) Advisory services & information provision to companies, start-ups, customers, technology

⁴² <http://www.pre-kom.hr/zero-waste-2020.html>

⁴³ http://www.mzoip.hr/doc/management_plan_of_the_republic_of_croatia_for_the_period_2017-2022.pdf

⁴⁴ http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=0&language=en&pcode=t2020_rt120

⁴⁵ <http://www.poslovní.hr/hrvatska/ako-se-plastiku-isplati-odvojeno-sortirati-u-austriji-isplati-se-i-ovdje-315660>

⁴⁶ http://sajamideja.fkit.hr/sajam%202016/prezentacije/Vu%C4%8Di%C4%87_predavanje.pdf

⁴⁷ http://www.eco-innovation.eu/index.php?option=com_content&view=article&id=649&Itemid=296

⁴⁸ GreenXpo, Circular Economy Policy Guidance, 2014

adopters etc.; b) Professional training and qualification and skills enhancement courses i.e. in material chain management; c) Support networking via matchmaking technology platforms.

(5) *Voluntary measures* with regarding policies: a) Performance label for products and services; b) Guarantee for product durability repair; c) Negotiated agreements (public-private sector); d) Public or unilateral voluntary commitments (by private sector).

5. CONCLUSION

One of the intentions of this paper was to bring the debates about the circular economy concept to a wider audience primarily in Croatia and increase its impact in the literature but also in the practice. The conclusion is that CE must go beyond concept to make a change in the economic system that will be oriented towards sustainable development.

In order to promote the transition to circular economy, the European Union launched regulatory package setting waste management targets and encouraging member states to create more value from products throughout their lifecycle. Finally, the challenges of introducing CE in Croatia are described in the context of the achieved progress based on available indicators.

Although there are several examples of good practice at the company level regarding the introduction of CE principles in production process, Croatia is facing significant barriers especially regarding the waste management. Developing regulatory framework in full compliance with EU regulations, introducing economic instruments, providing professional training, improving product design and encouraging innovations require portfolio of carefully chosen policy measures to initiate the CE transition process in Croatia.

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THE IMPORTANCE OF NAUTICAL TOURISM IN THE ISLAND OF FAIAL - AZORES

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ABSTRACT

The main objective of this work is to understand the importance of Nautical Tourism in the Island of Faial and to differentiate the island as destination of Nautical Tourism and Tourism of Nature and Adventure. It is also intended to indicate the necessary actions that can contribute to the increase of the attractive capacity of Faial, its valorization and development and, mainly, the affirmation of the island of Faial and the city of Horta as the Capital of Nautical Tourism. In order to better understand the importance of nautical tourism, surveys were carried out on 160 tourists that circulated in the island of Faial during the period between July 1, 2016 and August 31, 2016, and some interviews were conducted, both to entrepreneurs in the Maritime-tourist branch as well as the Regional Tourism Director. Through this work it is concluded that Faial is an island facing the sea, not only in the present but through a historical past connected to the whaling and, together with the neighboring island of Pico, knew how to use this history and this tradition, adapting to the new reality of Whale Watching. Taking in advantage of what the island has the best, its landscape, nature, natural attractions, diversity of fauna, tranquility, security and authenticity, it will be necessary to focus on a sustainable and structured development, not only in what is directly Connected to Tourism, Nautical Tourism and the Sea, but to everything that can bring to the island better quality of life, better quality of services, better access and connections, at a fair but differentiating price. It is important to live up to the past and the nautical history of the island and to know how to take advantage of the product "Triângulo", joining synergies between the three islands where all will benefit, differentiating Faial and Horta, in order to make this destination a reference of Nautical Tourism.

KEY WORDS: Tourism, nautical tourism, Azores, Faial, Horta.

1. INTRODUCTION

The National Strategic Tourism Plan for Portugal (PENT) identifies ten tourism products for the country: Sun and Sea; Health Tourism; Short Term City Stays; Tourist, Religious and Cultural Circuits; Gastronomy and Wines; Nature Tourism; Golf; Nautical Tourism; Business Tourism and Residential Tourism. For the Tourism Region of the Azores Nature Tourism is assumed as a consolidated product, Gastronomy and Wine being considered as a complementary product. The Tourist, Religious and Cultural Circuits and Nautical Tourism are considered products in development in the region.

Looking at the nine islands of the Archipelago it is easy to identify in the Islands of the Triangle (Faial, Pico and São Jorge) a strong nautical vocation, being in the case of the first two a strong connection to the Whale Watching industry and to a whole connected historical past to the hunt of the sperm whale.

The economic base of the islands is generally very limited and, therefore, they tend to become very dependent on

tourism (Baum, 1993). The attractiveness of the islands is largely based on their geographic location, but the high transport costs they entail reduce the range of potential target markets to capture and the kinds of development that may occur (Wing, 1995; Kakazu, 1994).

In terms of social fragility, small islands have a small population, so deficiencies in the level of qualified human resources for tourism are frequent (Baum, 1993), and are also more prone to antagonism by Part of the residents. The reduced population size restricts domestic tourism, further accentuating dependence on the arrival of foreign tourists and vulnerability to decisions taken externally (Wilkinson, 1989).

Small islands, such as the Azores, should offer distinct, attractive and competitive tourism experiences that differentiate them from other destinations (Ritchie, 1993). However, resource constraints often mean a lack of resources for tourism promotion (Wing, 1995) or, for many of the activities that support tourism, severe diseconomies of scale are observed, which have been discussed In the

literature (Kakazu, 1994). Traditionally, islands have been traditionally, islands have been able to attract tourists by virtue of their characteristics, but as they begin to compete with a wider range of destinations, the issue of competitiveness becomes critical. For this reason, the most recent conceptual models of tourist destination competitiveness play a pivotal role in all dimensions of sustainability (environmental, economic, social, cultural and political), arguing that competitiveness without sustainability is illusory (Ritchie & Crouch, 2003).

2. LITERATURE REVIEW

In order to understand the importance of Nautical Tourism in the island of Faial, it is presented in this article a review of the literature on Nautical Tourism and the Construct Motivations that led tourists to visit the island.

According to Kljajić (1962), cited by Vuksanović, Pivac & Dragin (2013), the term “nautical” comes from a Greek word *nutos* (sailor) and means a navigation ability, unlike Lukovic (2007), cited by Vuksanović, Pivac & Dragin (2013), who believes that the term is derived from a Greek word *naus*, which means ship, but also the ability to navigate.

In the literature, the term “nautical tourism” is often identified with the term “maritime tourism” as well as with sailing and other activities exclusively from the sea. However, this type of tourism is also carried out in rivers, lakes and their coasts, in recreational, entertainment and sport boats, stationary or at sea (Stetic *et al.*, 2013), cited by Vuksanović, Pivac & Dragin (2013).

Nautical tourism has as its basic motivation, according to PENT, published for the first time in 2007, to enjoy an active trip in contact with water, with the possibility of performing all kinds of nautical activities, in leisure or in competition. According to Ferradás (2001) nautical tourism is considered a segment of coastal tourism related to leisure practices and sports activities in contact with the sea and associated with other types of tourism such as sun and beach. This type of tourism is often classified as a subtype of sports tourism (Rodríguez, 2004), revealing itself as one of the main strategic tourist products of PENT.

The most important effects of the development of nautical tourism occur at local level, that is, in certain cities, especially on islands. Considering that islands are physically isolated due to their geographical position, and often socially isolated and treated as isolated communities, one of the most important effects of nautical tourism is to positively affect these islands. In general, it can be said that tourism has a positive influence on island development (Kozak & Rimmington, 1998). Since life on the islands continues - most of the time - according to the “limited resource” principle, the nautical visit of various island destinations (localities, ports and bays) has contributed significantly to changing living conditions in the islands. Islands in these terms (Žabica, 2006), cited by Favro & Gržetić (2016).

In general, it can be said that Nautical Tourism is a relevant activity for the qualification of the tourist offer, namely for its contribution to the diversification of the activity of tourist animation. This is, as already mentioned, one of the ten national strategic tourism products identified in PENT. Nautical Tourism is organized in two main markets:

- Recreational Nautical: experiences related to the performance of nautical sports or charter nautical, as a form of leisure and entertainment; includes a wide variety of sports: sailing, windsurfing, surfing, diving, etc. and represents about 85% of total sailing trips;
- Nautical Sports: experiences based on trips made and whose objective is to participate in nautical-sport competitions; it is a very specific market, with its own rules of operation; Represents 15% of this sector (Asesores en Turismo Hotelería y Recreación (THR), 2006).

2.1 Motivations

There are many studies of motivation, and most of them define them as the needs that make a person or individual direct their actions in order to satisfy a need (Crandall, 1980; Pizam, Neumann & Reichel, 1979). From the tourist point of view, when an individual faces the decision to travel, motivations are explained as an inner force originating from a need that drives individuals to behave in a way to be able to satisfy their needs (Schiffman & Kanuk, 2004).

Looking at the factors identified as push attributes, the study by Mohammad & Som (2010) stated that the needs of prestige and social interaction are among the most important reasons and that trigger the need to travel. This evidence is consistent with Crandall's (1980) argument cited by Mohammad & Som (2010), because people travel with specific motives to explore and evaluate themselves, to gain prestige, and to increase kinship relationships.

Another construct studied in relation to the motivations is about the motivations to repeat visits. Repetition of visits is a central dimension of loyalty to a destination by tourists and maintains the attention of academics and professionals (Oppermann, 1998, 2000). However, for Chen & Tsai (2007), Jang & Feng (2007), Lee, Jeon & Kim (2011), Mechinda, Serirat, & Gulid (2009) and Yuan & Jang (2008) the intention of tourists to revisit a destination has been widely explored, for Hughes & Saunders (2002), Lau & McKercher (2004) and Li *et al.* (2008), empirical investigations into the motivation behind repeat visits are actually very rare (Chen & Xiao, 2013).

In order to finish the concept of motivations, it will also be important to analyze the motivations related to adventure activities.

The motivations of adventure tourists are significant to tourism as both a category of human behavior and a worldwide industry that generates about a trillion dollars.

From a social science perspective, adventure tourism clients make conscious choices to direct their time and resources to discretionary adventure activities without material gain (Buckley, 2012).

3. METHODOLOGY

For the survey a paper support was used and it was carried out in person, using a "non-probabilistic for convenience" sample. Its application took place during the months of July and August of 2016.

163 surveys were collected and validated 160 of them at the end. The data were then placed in a *Microsoft Excel* file and imported into *IBM SPSS Statistics 21* where data processing was performed and variables were crossed.

4. MAIN RESULTS

Through the analysis of the sociodemographic data of the interviewed, 63 of the 160 respondents are women, corresponding to 39% of the total, and 97 are men, corresponding to 61%.

As far as the age group is concerned, the largest group of respondents is in the 41-45 age group with 32 subjects (20%), followed by the range 31-35 (16%), 36-40 (13%), 46-50 (12%), 26-30 (12%), 51-55 (11%), 56-65 (4%), 21-25 (2%), 16-20 (2%) and over 75 years (1%). In summary, the demand for Faial is between 26 and 65 years of age, with the highest concentration in the 41 to 45 age group.

In terms of respondents' nationality, and as expected, it is the Portuguese market that most search for the island with 45 respondents (28%), followed by the German market with 25 respondents (17%) and the Dutch with 12 respondents (7.5%). The Russian market had 9 respondents (6%) and ranked fourth. The French, English and North American markets then appear with 8 respondents each, followed by Spanish and Italian with 7 respondents, the Swiss with 6 respondents, the Danish and the Belgian with 4 respondents each, the Republic of Ireland with 3, then Sweden, the Czech Republic, Poland, Finland, Brazil and Austria with 2 respondents each and finally Canada and Luxembourg with 1 respondent each.

Of the 160 respondents, 61 are single (38%), couple without children, couple with at least one child younger than 6 years, couple with at least one child older than 6 years present 6 subjects each (4% each), couple with at least one older dependent child and a couple with at least one older independent child has 33 subjects each (20% each), widowed individual (1%) and divorced are 14 individuals (9%).

In relation to the education of the respondents, there are no records for individuals with less than 6 years of schooling, with up to 9 years of schooling, including, 10 individuals (6%), up to 12 years, including, 29 individuals

(18%), with college degree 88 (55%), with master degree 28 (18%) and with doctorate 5 (3%).

Of the 160 respondents, 4 are entrepreneurs (3%), 12 are liberal professionals (8%), 63 are middle/senior board (42%), 17 are commercial or administrative staff (11%), 43 are State employees (29%), 1 is worker (1%) and 3 are pensioners or retired people (2%). There are no entries for unemployed or domestic, students are 4 (3%) and in other professions appears 1 individual (1%).

As far as income is concerned, of the 160 respondents, 5 individuals with incomes up to 500 euros (3%), there are no incomes for incomes between 501 euros and 1000 euros, in income between 1001 and 1500 euros appear 19 individuals (12%), between 1501 and 2000 appear 26 individuals (16%), from 2001 to 2500 appear 28 individuals (18%), between 2501 and 3000 euros appear 31 individuals (19%), between 3001 euros and 3500 euros appear 26 individuals (16%) and with incomes higher than 3000 euros appear 25 individuals (16%).

As far as the characteristics of the respondents are concerned, the majority (98%) have vacations in two periods a year, followed by those who take vacations in three periods a year with 34 admissions (21%), one period a year with 18 entries (12%), 4 periods a year with eight entries (5%) and with five or more periods appear two entries (1%).

Regarding the number of times that respondents take vacations a year in recreation, 90% (56%) do this type of vacation once a year, followed by the respondents who do this type of vacation twice (35%), three times a year has 11 entries (7%), and five or more appear 3 times (2%).

Of the 160 respondents, 109 (68%) were visiting the island for the first time and 51 (32%) had previously visited the island. Of the 51 respondents who had previously visited the island, it is noted that there is a fairly regular distribution with the number of times they have done so, with only one difference being noticed in those who did it four times.

In relation to the nautical activities practiced it is necessary to emphasize in the first place those of less demand. Here we have the cruises with 155 respondents not to practice at all (97%), followed by the free dive and Big-Game fishing with 145 of the respondents not to practice once each (91% each), then the diving baptism with 131 of the respondents (82%), the sailboat rides with 125 of the respondents to not practice once (78%) and the sport fishing with 116 of the respondents (73%). Regarding the most practiced activities, cetaceans were observed with only 12 of the respondents not practicing this activity, being practiced by 148 (93%), followed by other activities that were not practiced by 56 of the respondents, being practiced by 104 of the respondents (65%) and then scuba diving where 64 did not practice this activity, resulting in 96 practitioners (60%).

It is important to note that scuba diving was practiced five or more times by 75 of its practitioners. If it is considered

that diving baptism is a scuba diving activity then the result of “non-practitioners” drops to 35 respondents, resulting in a total of 125 practitioners (78%) of the 160 respondents.

For a better analysis of the motivations of the visits to Faial, a set of items related to the visit where, through the presentation of affirmations, they were asked on a scale of 7 Likert points that answered from 1 (totally disagree) to 7 (agree fully).

First, the analyzed variables are presented with their values for mean and standard deviation (see table 1). It is verified that almost all the items present averages superior to the intermediate value of the scale (3,5) which means that the people agree, in great extent, with the presented statements. Only items B.1, B.2.B.3, B.4, B.5 and B.15 present a value below the intermediate value.

Table 1. Mean and standard deviation of the items related to Motivation to visit the island of Faial

Variable	Items	Mean	Standard deviation
B.1	B.1. I do not have enough money to visit more remote destinations	2,0188	1,44271
B.2	B.2. I do not have enough time to visit more remote destinations	1,7313	1,42627
B.3	B.3. To increase my social status	1,3250	,92858
B.4	B.4. To visit a place where my friends have already been	2,2125	1,78176
B.5	B.5. To visit a place that will impress my friends and family	1,4125	1,04242
B.6	B.6. To visit one of the best nautical destinations in the world	4,5938	1,58728
B.7	B.7. To exchange customs and traditions	4,2813	1,24976
B.8	B.8. To participate in new activities	4,9188	1,54175
B.9	B.9. To appreciate natural resources	6,0500	1,21728
B.10	B.10. To be away from home	6,2500	1,34585
B.11	B.11. To relax physically	5,4563	1,26315
B.12	B.12. To find emotion and excitement	5,7063	1,34397
B.13	B.13. To have a nice time on my trip	6,9563	,30400
B.14	B.14. To meet new people	4,6938	1,04609
B.15	B.15. To visit friends and family	2,5188	2,18333
B.16	B.16. To fulfill my dream of visiting Faial Island	4,9313	2,27682
B.17	B.17. To visit touristic sights	5,3563	1,63817
B.18	B.18. To visit a place I had not visited before	5,1875	2,64739
B.19	B.19. To increase my knowledge about Faial Island	5,2313	1,70910
B.20	B.20. To experience a new lifestyle or different traditions	4,5063	1,60579

Source: Authors

We then analyzed the main components of this set of items in order to find combinations of variables (factors) that explain the correlations between all pairs of variables. For application and validation of this technique it is necessary to evaluate the correlations between the variables to know if it is legitimate to perform a factorial analysis

The Kaiser-Meyer-Olkin value (KMO = 0.738) which shows the value of the adequacy measure, considers the acceptable level analysis. The Bartlett test, which tests the null hypothesis that the correlation matrix is an identity matrix, has the value 1495.047 and an associated probability of 0.000, which rejects the null hypothesis that

the correlation matrix is an identity matrix (see Table 2). These tests indicate that the 20 variables are adequate to perform a factorial analysis.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,738
C	Approx. Chi-Square	1495,047
	df	190
	Sig.	,000

Source: Authors

The Kaiser criterion (eigenvalue greater than 1) found five factors that explain 65.283% of the total variance in the set of 20 variables analyzed (see table 3).

Table 3. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,754	23,768	23,768	4,754	23,768	23,768	4,276	21,381	21,381
2	2,676	13,379	37,147	2,676	13,379	37,147	2,419	12,093	33,474
3	2,357	11,787	48,934	2,357	11,787	48,934	2,178	10,889	44,363
4	1,832	9,160	58,093	1,832	9,160	58,093	2,117	10,587	54,950
5	1,438	7,190	65,283	1,438	7,190	65,283	2,067	10,333	65,283
6	,955	4,774	70,057						
7	,833	4,167	74,224						
8	,785	3,926	78,150						
9	,759	3,797	81,947						
10	,593	2,964	84,911						
11	,527	2,633	87,543						
12	,425	2,124	89,668						
13	,384	1,918	91,585						
14	,360	1,802	93,387						
15	,337	1,687	95,074						
16	,273	1,365	96,439						
17	,242	1,212	97,651						
18	,203	1,017	98,668						
19	,167	,834	99,502						
20	,100	,498	100,000						

Extraction Method: Principal Component Analysis.

Source: Authors

For a better interpretation of the factors, the axes were rotated using the varimax method. The proportion of variance explained by the components remains constant, only distributed differently so that the differences between combinations of variables are maximized: increasing those that contribute most to factor formation and decreasing the weights of those that contribute least.

Table 4 shows the weights of the variables in each factor. Thus, factor 1 is composed of variables B.16, B.18, B.15,

B.19, B.20 and B.17 and designated "Novelty". Factor 2 is composed of variables B.11, B.12, B.9, B.10 and B.8 and designated "Fun". Factor 3, composed of variables B.14 and B.7, is called "Relationship". Factor 4 is composed of variables B.3 and B.5 and designated "Social Status". Finally, factor 5 is composed of variables B.2, B.1, B.13 and B.4, which is called "Time and money". Only weights greater than 0.5 were considered for easier interpretation and for each variable to present only weights in a single factor.

Table 4. Rotated Component Matrixa

	Component				
	1	2	3	4	5
B.16. To fulfil my dream of visiting Faial Island]	,904				
B.18. To visit a place I haven't visited before]	,895				
B.15. To visit friends and family]	-,798				
B.19. To increase my knowledge about Faial Island]	,762				
B.20. To experience a new lifestyle or different traditions]	,717				
B.17. To visit tourist spots]	,685				
B.11. To physically relax]		,791			
B.12. To find emotion and excitement]		,755			
B.9. To enjoy its natural resources]		,584			
B.10. To be away from home]		,535			
B.8. To engage in new activities]		,526			
B.14. To meet new people]			,714		
B.7. To exchange culture and traditions]			,680		
B.6. To visit a place that is regarded as one of the top nautical destinations in the world]					
B.3. I visited Faial Island to increase my social status]				,878	
B.5. To visit a place that will impress my friends and family]				,865	
B.2. I don't have enough time to visit the most remote destinations]					,707
B.1. I cannot afford to visit the most remote destinations]					,644
B.13. To enjoy a good time in my journey]					-,586
B.4. To visit a place where friends of mine have been before]					,502

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization; a. Rotation converged in 8 iterations.

Source: Authors

5. CONCLUSIONS

Nautical Tourism, as already mentioned, is one of the ten Strategic Tourism Products for Portugal, according to PENT (2006). Also according to PENT, this Tourist Product is one of the five most important products for the Azores Archipelago, being the island of Faial the island of water sports for excellence and a mandatory stop for all sailors.

It is then necessary to endow the island with structures and infrastructures capable of receiving the tourist in the best way, retaining it to this destination and enabling a better promotion and dissemination of Faial.

It is necessary to know how to take advantage of what the island has to offer, its landscape, nature, diversity of fauna, tranquility, bet on a sustainable and structured development, not only in what is directly related to Tourism, Nautical Tourism and Sea , But to everything that can bring to the island better quality of life, better quality of services, Better access and connections, a fair

price but different, to live up to the past and the nautical history of the island and to know how to take advantage of the product "Triângulo" with a combination of synergies between the three islands, where all will benefit.

In relation to the visit to Faial, most of the respondents were visiting the island for the first time but a significant number of respondents had already visited the island previously which denotes an affinity with the destination.

Regarding the respondents' satisfaction with the visit to the island, the majority were completely satisfied. Also, most of the respondents were equally satisfied with the nautical services of the island, with the nautical services comparing with their expectations and with the nautical services considering the time and the effort.

Through the Multivariate Analysis one can conclude that the most important factors that led the respondents to visit the island of Faial were the "Novelty" followed by "Fun", followed by the "Relationship" factor. With less

importance appears the factor “Social Status” and lastly the factor “Time and money”.

Still in relation to the image of the respondents about Faial, it is important to mention that the quality of the infrastructures was the one that had less appreciation.

Most respondents would recommend the nautical services of the island to family and friends and would make positive comments on the nautical services of the island to other people. A good percentage of respondents also responded very positively about the probability of returning to Faial Island in the next three years.

Some strategic lines and a set of actions are suggested, not only related to nautical tourism, but also with other activities that complement and project the entire tourist development. In this sense, we present five strategic lines for the island of Faial and for the city of Horta, making it the Capital of Nautical Tourism:

1. Make Faial and Horta an active and sustainable island / city;
2. Increase the rate of employability, set the population and attract new residents;
3. Make Faial and Horta an island / nautical city, within the reach of tourists, being a mark of quality;
4. To be an island / city that promotes its positioning in the Autonomous Region of the Azores, in Portugal and abroad as a factor of attraction and differentiation;
5. Strengthen the diversity of tourist supply and value existing assets.

The sample of 160 is relatively small compared to the number of visitors on the island during the period of the survey (from 1 July to 31 August), which makes up a sample of 0.8%.

The sample used, as previously mentioned, was a non-probabilistic sample for convenience. For a better result it would be advisable for future investigations to use a probabilistic sample by clusters in time and space. The same days of the week would be used throughout the period of the survey, using the same time and using the same sites.

During this period, the inquirer can only apply the survey during the weekly gap, which has greatly limited the number of respondents. Weekly slots (one per week) sometimes did not coincide with the best days of traffic at the airport or in the sea port of Horta and sometimes also coincided with rainy days or bad weather, which decreased the number of tourists in Stroll through town or island.

For a better investigation it would be important that the sample could have a higher percentage of respondents and the survey could be applied daily over the whole period or even extend the period of application of the surveys. Still in relation to the survey, it would be relevant if an open-ended question had been contemplated where the respondents could leave a more personal opinion or even some suggestion.

Knowing that it is the observation of cetaceans and scuba diving the most wanted activities on the island, it would be interesting to do a study only to its practitioners or about these nautical activities.

It would be interesting to apply this type of study in other islands of the RAA and try to understand the impact that Nautical Tourism has on these islands and also to realize its real importance in the context of the archipelago as a whole. This study can also be applied in the Autonomous Region of Madeira with the same intention.

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MOTIVATIONS AND EXPERIENCES OF WOMEN SOLO TRAVELLERS

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ABSTRACT

The concept of female solo traveler, despite recent, has become a relevant tourist segment. As tourists, these women are looking for journeys that bring more than a trip from one place to another. They choose to go alone in the pursuit of adventure, independence, feeling of personal fulfillment, individuality and escape. They do not travel alone because they have no choice or because they are loners. They are driven by specific and consciousness motivations.

In this conceptual work, a set of solo travel motivations are categorized based on literature review, in order to identify why women choose to travel alone. Even if it is a market that has not been very explored and studied has gained numerous supporters around the world, translating into an expressive impact not only in sociological terms, but also in its tourist experience.

An extensive literature review focusing on the concept of tourism motivations and experiences provide a framework that allows assesses the specific motivations that driven women into travel alone and the corresponding solo traveler experience dimensions. The multi-dimension scales considers eight motivations dimensions: (1) escape, (2) self-identity and development, (3) challenge, (4) connectedness with others, (5) learning, (6) adventure, (7) new life perspectives, and (8) autonomy; and five experience dimensions: (1) sense, (2) feel, (3) think, (4) act, and (5) relate.

The focus of this article is to explore the relationship between these motivations with women solo travel experiences providing a conceptual model.

KEY WORDS: women, motivations, solo traveler, experience.

1. INTRODUCTION

The earliest know female travellers were primarily pilgrims, making the journey to Holy Land and Jerusalem. Since the end of the nineteen-century, there has been a set of social and political facts and changes that increase the female participation in contemporary travel (Wilson & Harris, 2006).

Nowadays, women are increasingly choosing to travel alone (Wilson & Little, 2008). Western women in today's society have increased options, which have opened up a range of tourism and recreation choices (Wilson & Little, 2005, p.159).

Within this context the present study aims to identify the main motivations of women solo travelers and relate these motivations with a specific tourism experiences' dimensions.

An extensive literature review focusing on the concept of tourism motivations and experiences provide a framework that allows assesses the specific motivations that driven women into travel alone and the corresponding solo

traveler experience dimensions. The multi-dimension scales considers eight motivations dimensions: (1) escape, (2) self-identity and development, (3) challenge, (4) connectedness with others, (5) learning, (6) adventure, (7) new life perspectives, and (8) autonomy; and five experience dimensions: (1) sense, (2) feel, (3) think, (4) act, and (5) relate, based on Schmitt' model tourism experience (Schmitt, 1999).

3. THE CONCEPT OF SOLO TRAVELER

In some way solo travel was and is regarded as a journey travel invoking a kind of spiritual travel. And this relation of tourism with the need to meet spiritual needs and cultural enrichment goes back to pilgrims, and the ideia of trying to find meaning in their lives closely linked to the divine and religious issue (Cohen, 1979, Silva 2011).

However, this relationship of experience with tourism was not only related with religious reasons but instead with deep social transformations. The counterculture movements evident in the 1960s, more prominently in

the US, profoundly affected generations around the world, introducing new mindsets and ways of facing the journey. The hippie movement had a deep impact on youth values, with new behaviors and sensory and sensorial experiences promoting the desire and feeling of freedom (Groppo, 2004).

Related with the pioneering character and behavioral experimentation of the hippie counterculture, the drifter concept arises directly linked to this important sociological background. A drifter seeks adventure, faces risks and anticipates new tourist attractions (Enzensberger, 1985). Cohen (1972) defines a drifter as venturing 'furthest away from his home country. (...). The drifter has no fixed itinerary or timetable and no well-defined goals of travel.'

In the 1990s backpacker terminology begins to be commonly used, as a variant of explorer or drifter. This tourist was recognized as young, budget tourists on extended holiday (Loker-Murphy & Pearce, 1995). Most backpackers travel alone or in small groups, look for cheap accommodations and are quite flexible in the type of tourism (Scheyvens, 2002). They seek experiences, and want to explore unusual places, being mainly a journey of discovery (Haigh 1995).

Although the terminology of backpacking tourism is frequently used, nowadays, the concept of solo traveling become more common, defining people who want to travel alone and seek to live the feeling of discovery.

4. SOLO TRAVELERS WOMEN MOTIVATIONS

Tourists in general are moved towards search of experiences that provide escape, freedom and pleasure (Wilson & Little, 2005).

The relationship between travel and experience is the key point of why women choose to travel alone. The goal is not

the journey per se, but the involvement and the acquired competences. Solo women travelers seek adventure, social interaction, education and self-understanding (Bond, 1997).

Despite the fact that each woman has her own reasons to travel alone, it is possible to recognize some common motivations. And the main motivations that lead women to choose to travel alone are the need to get out of their comfort zone in order to develop a sense of autonomy and individuality (Wilson & Little, 2008), and the challenge and personal growth (Chiang & Jongaratnam, 2006; Wilson & Little, 2005, 2008; McNamara & Prideaux, 2010).

Wilson and Harris (2006), after analyzing several testimonies of female travelers, introduce the concept of meaningful travel. The journey translates into the search for something much more valuable than relaxation and leisure. These women want to evaluate they own values, develop their identities and acquire knowledge.

Another relevant reason it's the importance of socialization for these tourists. The human development factor, previously stated is reliable with the ties created, the interaction with other travelers and the autochthonous (Jordan & Gibson, 2005; Wilson & Little, 2005; Wilson & Harris, 2006).

Despite the significant sociological aspects, motivations related with culture and learning are also mentioned in tourism literature. The woman solo traveler desires the escape of the daily life, looking for diverse cultural contexts other than those to which she is used to. This issue is associated to the duality about familiarity vs novelty when describing explorers and drifters (Crompton, 1979; Bond,1997; Silva, 2011).

Finally, and in a broader sense, all these factors can be grouped together, agreeing that a female solo traveler seeks an adventure, a memorable experience, and leisure (Bond, 1997) as we can see in table below.

Table 1. Main motivations dimensions of women solo travelers and research studies

Challenge and Overcoming	(Bond, 1997; Jordan & Gibson, 2005; Chiang & Jongaratnam, 2006; Wilson & Little, 2005, 2008; McNamara & Prideaux, 2010)
Self-recognition	(Wilson & Harris, 2006)
Contact with other travelers	(Jordan and Gibson, 2005; Wilson & Little, 2005; Wilson & Harris, 2006)
New life prespectives	(Jordan & Gibson, 2005; Chiang & Jongaratnam, 2006; Wilson & Little, 2005, 2008; McNamara & Prideaux, 2010).
Escape to routine	(Crompton, 1979; Bond 1997)
Learning, New experiences	(Crompton, 1979; Bond, 1997)
Autonomy	Bond; 1997; Jordan & Gibson, 2005; Chiang e Jongaratnam, 2006; Wilson and Harris, 2006; Wilson & Little, 2005, 2008; McNamara & Prideaux, 2010).
Adventure and Leisure	(Bond, 1997)

Source: Own production

5. TOURISM EXPERIENCE

According Pine and Gilmore (1999), a tourist experience can be defined as a “set of activities in which individuals engage on personal terms” (p.12). For Oh, Fiore & Jeoung (2007), who analyzed this concept from the consumers’ perspective, a tourist experience is something “pleasant, engaging, and memorable” (p.120), allowing each tourist to build his or her own travel experiences so that these satisfy a wide range of personal needs, from pleasure to a search for meaning.

Schmitt (1999) conceptualized experience as individual and shared experiences. The model comprises *sensing*, *feeling* and *thinking* in individual experiences and acting and relating are considered as shared experiences (Loureiro, 2014).

5.1. Sense

Sense dimension is allied with sensory experiences. Appeal to the senses (hearing, taste, touch, sight, smell) with the aim of creating sensorial experiences, increasing value to the products.

5.2. Feel

This experience dimension is related with affective experiences, creating feelings, moods and emotions.

5.3. Think

The think dimension is associated with cognitive experiences that engage tourists creatively, generating thought, surprise and/or provocation.

5.4. Act

Act dimension is concerned with physical experiences, behaviors, lifestyles. Create physical experiences aimed at the physical development of the consumer showing him / her alternative forms to the lifestyle and interactions.

5.5. Relate

Relate dimension is linked with experiences of social identity, reference groups or cultures. This dimension contains aspects of the other dimensions mentioned above. This is of identification with the individual, related to his self, integration, as for example: with his social and cultural identity.

6. METHODOLOGY

A conceptual model is proposed, based on the previously presented literature review, which additionally provided the grounds for defining dimensions and suggesting the operationalization of the motivation and experience constructs and corresponding dimensions.

From the literature review, it is accepted that motivation is multidimensional. Tourists pursue to satisfy not one single need but a number of distinctive needs concurrently. Thus, a review of literature was conducted to develop a list of motivations items, which are generally used to measure tourism and travel motivations, adapting to women solo travel.

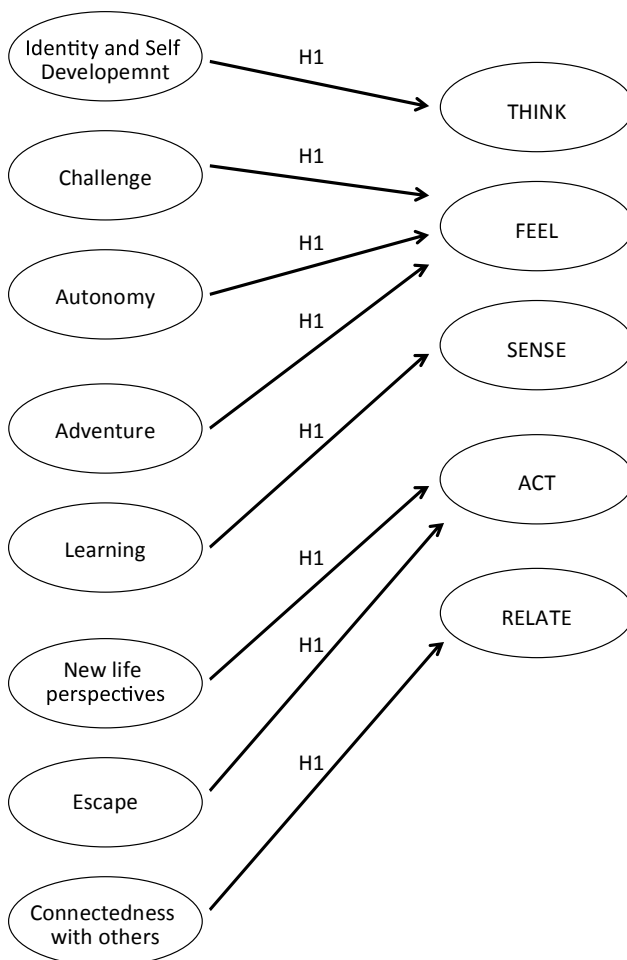
On the other hand, the travel experience variables considered pre-established dimensions and scales from the tourism literature review based on the experience model of Schmitt (1999), in which *thinking*, *sensing*, *feeling*, *acting* and *relating* are considered the experience dimensions.

7. CONCEPTUAL MODEL

The conceptual model “Women Solo Travelers: Motivations and Experiences” proposed considers eight motivations dimensions and five dimensions of tourism experiences.

The hypothesized conceptual model that is suggested is described in Fig. 1. This model recommends that each dimension of motivations will positively predict particular dimension of tourism experience, rising in the following eight hypotheses.

Figure 1. Hypothesized Conceptual Model: Women Solo Travelers: Motivations and Experiences



Source: http://ec.europa.eu/environment/waste/target_review.htm, EC (2015b:3)

H1 – *The identity and self-development motivations positively influences the think dimension of solo women travel experiences*

The concept of identity arises from the multiple and differentiated roles an individual play in society (Lynch, 2007).

Independent travel is perceived as a way to women search for self-identity and self-development due the meaningful travel it is travelling alone (Wilson & Harris, 2006).

In this sense, it is hypothesized that identity and self-development motivations positively influences the think experience dimension, generating and improving thoughts and cognitive experiences.

H2 – The challenge motivations positively influences the feel dimension of solo women travel experiences

Dealing with the challenge of travel alone, many women reported a strong feel of empowerment (Wilson & Harris, 2006). In this way it is suggest that challenge motivations positively influence the feel dimension of solo women travel experiences.

H3 – The autonomy motivations positively influences the feel dimension of solo women travel experiences

It is assumed that the autonomy motivations positively influences the feel dimension of solo women travel experiences because for women the possibility of making their own choices and control their own actions create feelings of control and independence (Wilson & Harris, 2006), a kind of a freedom sense that improve the affective experience of travel alone.

H4 – The adventure motivations positively influences the feel dimension of solo women travel experiences

Solo travel is also about an adventure experience. In fact, travelling alone per se is an adventure (Elsurd, 2005).

Adventure/excitement motivations in tourism are associated with deliberate risk, danger, and sensation seeking (Gyimóthy and Mykletun, 2004). Thus, it is suggest that adventure motivations positively influences the feel dimension of solo women travel experiences.

H5 – The learning motivations positively influences the sense dimension of solo women travel experiences

People desire to learn new things and develop new insights and skills because of the tourism experiences (Poria, Reichel & Brian, 2006; Richards, 2002; Sharpley & Sundaram, 2005). People learn about the world and expand their knowledge because of eye-opening travel experiences (Tuang & Ritchie, 2011) and the multisensory-encounter experiences (Kastenholz et al, 2012).

Within this, it is proposed that the learning motivations positively influences the sense dimension of solo women travel experiences because predispose women to a sensorial and memorable tourism experience.

H6 – The new life perspectives motivations positively influences the act dimension of solo women travel experiences

Independent travel is a meaningful part of people's lives and women in particular, through these experiences, reconsider their perspectives on life and ambition new ones (McNamara & Prideaux, 2010).

Considering that the act dimension of the experience is concerning with behaviors and lifestyles (Schmitt, 1999), being the lifestyle the main dimension of act experience (Roberts & Sparks, 2006), it is suggested that the new life perspectives motivations positively influences the act dimension of solo women travel experiences.

H7 – The escape motivations positively influences the act dimension of solo women travel experiences

One of the most attractive tourism characteristics is the ability to provide different and intensive experiences in which the tourist's standard social structures and conventions are eliminated (Silva, Abrantes & Lages, 2009).

The desire to travel is usually associated with the desire to escape from the daily life routine. In case of the women solo travellers, women do not travel alone only to see new places but to get new experiences and to feel independent in a way to escape the pressure from society. Also, travelling alone for women is an escape from the domestic and family responsibilities and from the femininity that challenges the dominant masculine image of adventure (Elsrud, 2005).

Considering act dimension of the experience as a physical experience, behavior and lifestyles, which provides her alternative forms to the lifestyle and interactions, it is hypothesized that the escape motivations positively influences the act dimension of solo women travel experiences.

H8 – The connectedness with others motivations positively influences the relate dimension of solo women travel experiences

Tourism is a social phenomenon that allows people to develop social interaction, to satisfy social acceptance, approval and integration needs (Silva, Abrantes & Lages, 2009).

Independent travel allows women meet new persons, building personal connections, make new social friends networks and learning how to better relate with others (Wilson & Harris, 2006). So, it is suggest that the motivation of contact with others positively influences the relate dimension of solo women travel experience by promoting experiences of social and cultural identity and social and cultural integration.

8. CONCLUSIONS

The presented study provides a conceptual framework that relates women traveler preferences with tourism experiences, based on previous experience dimension model by Schmitt (1999).

Tourism is an experimental phenomenon (Frochot & Morrison, 2000) where experiences are sought in relation to feelings of motivation (den Breejen, 2007).

The women's motivations for independent travel and tourism experiences are related to the desire to learn, self-development, challenge themselves, find a sense of identity and autonomy, meet new people and experience new life and adventure moments. These motivations

influences the solo women travel experiences turning it into a memorable tourism experiences.

The study aims to increase social and scientific knowledge of motivations and experiences concerning with solo travelers in order to fulfill the existence research gap in tourism literature. It pretends also to deepen the discussion on gender and tourism and particularly the role of women in travel and tourism.

On the other hand, the study could have also practical and managerial implications for tourism destination managers providing a conceptual framework of solo women motivations travel. Managers should highlight the most significance aspects of their uniqueness like the destination culture, local way of life and activities that stimulate visitors' senses and feelings, imagination, lifestyles and social encounters.

Nevertheless, the model has some limitations to be considered. Despite the review of literature that was been undertaking, it possible that the study could omit and not consider other important dimensions of motivations or tourism experiences. Thus it is suggests the application of qualitative methodology in the future such as content analysis of travel blogs, ad forums in order to identifying another possible motivational dimensions.

Also, and due the fact that motivations change overtime depending on travel patterns behaviors, it could be interesting investigate the differences between first-time and repeat solo independent women travel.

Finally, the relationship between motivations and constraints could also be relevance to analyse in future research, particularly how the constraints women feel impact on their motivations to travel alone.

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GASOLINE AND DIESEL PRICE AND INCOME ELASTICITIES

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ABSTRACT

The paper analyzes the price and income elasticity of demand for petroleum products, gasoline and diesel. With regard to the share of petroleum products in the structure of household expenses, as well as the share in the government budget revenues, the elasticities of demand for petroleum products are one of the essential elements for the implementation of the economic policy. The paper provides a theoretical overview of elasticities. The price, income and cross-elasticity of demand and their application to petroleum products are presented. The difference between the short-run and long-run effects on the elasticity of demand for petroleum products is emphasized. The influence of fiscal policy on the elasticity of demand, with regard to both price and income, is analyzed. The conclusion is that the elasticity of demand for petroleum products (price and income) has decreased over time.

KEY WORDS: demand, gasoline, price, income, elasticity, transport.

1. INTRODUCTION

The price and income elasticity of demand for petroleum products is important for the economic policy of any country. The income elasticity of demand for petroleum products can offer insight into the extent to which the demand for petroleum products shall increase if the income of the population increases and what direct or indirect implications it shall have on the economy (e.g. whether income growth increases the consumption of petroleum products, which in turn increases budget revenue, i.e. what is the extent of adverse effects on the environment). On the other hand, price elasticity facilitates insight into the effect additional taxation of petroleum products and filling of the budget shall have with regard to the fact that the demand for petroleum products is non-elastic. The basic characteristic of the elasticity of demand for petroleum products, both price and income, shall not be equal in higher and lower income groups, both at higher and lower prices. According to the economic theory, if the prices of petroleum products are increasing, the demand for them shall decrease, with the ceteris paribus assumption, indicating that the price and the required quantity are always negatively correlated. Income elasticity of demand for petroleum products signifies the response strength of the demand for petroleum products in relation to income change.

2. PRICE ELASTICITY OF DEMAND

With regard to statistical data processing methods, the demand for petroleum products can generally be divided into static and dynamic models. Since consumption, prices and income are mostly non-stationary variables, cointegration for the non-stationary variables is often used in analyzes to determine the long-run and short-run relations between petroleum product consumption and their price in the error correction model. The simplest static model for determining the demand for derivatives is reduced to the following equation (Dahl and Sterner, 1991):

$$G=f(P,Y,V, CHAR),$$

where

G is the petroleum product consumption,

P is the real petroleum product price,

Y is real income,

V is the vehicle number, and CHAR indicates the fleet characteristics.

The static¹ model of price elasticity of demand is most often expressed using a double log model:

$$\ln D_t = \beta_0 + \beta_1 \ln P_t + \beta_2 \ln Y_t + \epsilon_t,$$

¹ An economic model showing a set of interdependencies between economic system variables that are in a state of equilibrium at a given time or time period.

where

D_t is the average demand for petroleum products at time t ,

P_t is the real gasoline price at time t ,

Y_t is real income at time t ,

while ε_t is a standard error.

$$\frac{\delta \ln D_t}{\delta \ln P_t} = \beta_1$$

$$\frac{\delta \ln D_t}{\delta \ln Y_t} = \beta_2$$

The dynamic² model provides a better understanding of the driver's reaction to short-run and long-run price changes, and unlike the static model, it also enables the determination of shifts in the driver's response to the price changes. The subject shift is manifested through increases in response possibilities, such as transferring to public transport or using more fuel-efficient vehicles. By using the dynamic model, it is possible to determine the consumption of petroleum products as a function of current prices, income, but also the function of previous consumption, as well as income and prices from earlier periods.

Dahl (Dahl and Sterner, 1991) indicated the demand for gasoline as a function of current gasoline prices (P_{gas}), current prices of other forms of transport (P_{trans}), current income (Y), gasoline price from the previous period ($P_{gas,t-1}$), income from the previous period (Y_{t-1}) and the demand for gasoline in the previous period (G_{t-1})

$$G = f(P_{gas}, P_{trans}, Y, P_{veh}, P_{gas,t-1}, Y_{t-1}, G_{t-1})$$

The most commonly used approach refers to the use of a

partial adaptation model (PAM) for processing de-trended variables:

$$\ln D_t = \beta_0 + \beta_1 \ln P_t + \beta_2 \ln Y_t + \beta_3 \ln Y_{t-1} + \varepsilon_t$$

In this case, the β_1 coefficient indicates the coefficient of short-run elasticity of demand, and the coefficient of long-run elasticity of demand is calculated using the formula $\beta_1 / (1 - \beta_3)$. The adjustment time is calculated using the formula $1 / (1 - \beta_3)$. In addition to this model, another model with variable rotations (Dahl and Sterner, 1991) is used:

$$\ln D_t = \beta_0 + \sum_{i=0}^m \beta_{Pi} \ln P_{t-i} + \sum_{i=0}^n \beta_{Yi} \ln Y_{t-i} + \sum_{i=0}^q \beta_{Di} \ln D_{t-i} + \varepsilon_t$$

Common to most models is the fact that demand for petroleum products is conditioned by disposable income, product price, cost of car ownership and use (insurance, maintenance, etc.), car technology, urban structure, i.e. population density and the development of the public transport infrastructure.

Using price elasticity data collected on a sample of more than a hundred countries, Dahl (2012) found that price elasticity was the higher elasticity at high price levels for both gasoline and diesel fuel, higher for countries with higher per capita income for gasoline, while it was lower for diesel on the sample of countries belonging to higher income classes. The price elasticities for gasoline defined based on historical studies ranged between -0.11 and -0.33, while those for diesel fuel ranged between -0.13 and -0.38.

Certain studies show that price elasticity shall not be the same for certain income classes. Table 1 presents the study of price elasticity in terms of belonging to a certain income class. It is evident that there are large differences in elasticity with regard to the country and observation period.

Table 1. Overview of the current price elasticity studies with regard to income

Author	Change in price elasticity with regard to income classes	Analyzed countries	Study period
Archibald and Gillingham	Reduces in higher income classes for households that own one car and is statistically insignificant for households with more than one car	USA	1980
Archibald and Gillingham	Statistically insignificant connection between price and income	USA	1981
Kayser	Continuously increases with increasing household income	USA	2000
West and Williams	Decreases with higher income classes, for the middle and lowest income level it statistically does not differ from zero	USA	2004
West	Decreases with higher income classes, but indicates a reverse character in the two highest	USA	2004
Blow and Crawford	Decreases with higher income classes	Great Britain	1987
Yatchew and No	Statistically insignificant connection between price and income	Canada	2001
Santos and Catchesides	Decreases, but very little with an increase in income classes	Great Britain	2004

Source: Wadud Z., Graham, D.J., Noland, R.B. (2009) Modelling fuel demand for different socio-economic groups, *Applied Energy*, 86, p. 2740–2749

² Dynamic models include the time line and the process of changing a single equilibrium state in time and the process of transformation from the initial to the final state

The price elasticity of demand for petroleum products is generally negative and may vary between different values. The elasticities shall vary depending on the type of travel (commercial, business, recreational, etc.), type of driver (rich, poor, young, old, etc.), travel conditions (rural, urban, congested), and the observed period (short-run, mid-run and long-run) (Litman, 2013). There are several manners in which prices can affect driver behavior and their driving decisions. The number of vehicles purchased and the type of vehicle itself are affected by the fixed car price, i.e. registration costs. The type of car chosen is largely determined by fuel prices and excise duties that are directly related to harmful gas emissions. Toll collection can affect the change in route and travel destination, while congestion can change the time of travel, as well as the travel model selected.

With regard to price elasticity of demand for petroleum products, it is usually very low, and the first response to an increase in fuel prices shall be a reduction in travels that take place for the purposes of relaxation, rest, shopping, etc. So far, several studies have been conducted on price elasticity of demand for petroleum products and all studies have in common the fact that elasticities are very low, but differ depending on the country. The most interesting is the study conducted by the American scientist Espey (1996) who used a meta-analysis to compile 101 different studies and found that in the short-run (defined as 1 year or shorter), the average price elasticity of demand for petroleum products was -0.26, meaning that a 10% increase in gasoline prices reduced the fuel demand by 2.6%. In the long-run (defined as more than 1 year), the price elasticity of demand was -0.58, meaning that a 10% increase in gasoline prices caused a reduction in gasoline demand of 5.8%.

An interesting hypothesis was elaborated by Kayser (2000), who argues that an increase in travels occurs if individual income increases, emphasizing that the largest number of car travels are discretionary travels³. Alternatively, at lower income levels, the number of travels is already reduced to a minimum, leaving little room for adaptation to higher prices.

Another possible explanation is that the vehicle number per household increases with income. If households own two or more vehicles, there is a possibility that the drivers are shifting the demand towards more fuel-efficient vehicles when fuel prices increase.

3. INCOME ELASTICITY OF DEMAND

Income elasticity depends on the type of product consumed. Given the value of the income elasticity coefficient, there are normal goods and inferior goods. For normal goods, the elasticity coefficient is higher than zero, i.e. positive because the quantity of required goods increases as the income increases. For inferior goods, the elasticity coefficient is below zero, i.e. negative because the required quantity decreases as the income increases. With regard to coefficient value, normal goods are further

divided into necessity and luxury goods. Necessity goods are goods with a lower income elasticity coefficient between 0 and 1 since these are items necessary for functioning that people buy regardless of the income level, while luxury goods are goods whose elasticity coefficient is greater than 1, that is, people do not consume them in case of a low income level. At low levels of economic development, most goods and services are a luxury compared to basic foodstuffs. In the case of a growth in income, except for basic foodstuffs, demand for all goods and services increases more than proportionally. If income continues to grow, a saturation effect occurs, whereby the growth in demand for luxury goods shall be lower than income growth. Applied to the transport sector, this means that, as the economy develops and income grows, the income travel elasticity shall decrease, however not necessarily to zero (Moneta and Chai, 2010).

The gross domestic product (GDP) and gross domestic income per capita are most commonly used in models, depending on whether the total consumption of the products or the consumption per capita is analyzed.

Among recent studies into the subject topic (Dahl, 2012), the median value of income elasticity for gasoline was 0.57 and 50% of the value ranged between 0.25 and 0.99. Most of the studies were conducted using a model that included a car stock variable. It is assumed that, in the event that the car stock is kept constant, gasoline consumption would decrease due to income growth, suggesting that certain countries become richer and own increasingly newer and more fuel-efficient vehicles. The median value of income elasticity for diesel fuel is approximately 1, while 50% of the value ranged between 0.85 and 1.31. Given that income elasticity for gasoline is low, in some countries even negative, while it increases for diesel fuel, it is assumed that the measures of the policy aimed at stimulating the consumption of certain types of fuel can be implemented through the application of income elasticity of demand for petroleum products. In the OECD countries in Europe, the estimated income elasticity of demand for diesel fuel in the period from 1990 to 2007 amounted to 1.79. Such high elasticity reflects the policy and technology stimulating consumption in favor of diesel vehicles.

The simplest model for the presentation of the income elasticity coefficient is expressed by the formula:

$$\mathcal{E}_y = \frac{\Delta E}{\Delta Y} = \frac{\delta E}{\delta Y} * \frac{Y}{E},$$

where

Y is the income level,

E is the amount of petroleum products in demand,

and is explained by the percentage change in the demand for petroleum products resulting from a 1% increase in income, ceteri paribus.

³ This term refers to travels due to various forms of leisure, which are only taken when an individual has a surplus of funds (money) remaining after paying for basic travelling connected to making a living, such as traveling to work and other basic costs of living.

If it is assumed that the demand is a log linear function in the form:

$$Q = a + bY,$$

then the income elasticity is calculated using the following equation:

$$\varepsilon_y = \frac{dQ}{dY} * \frac{Y}{Q} = b * \frac{Y}{Q} = \frac{bY}{a+bY}$$

The following equation is derived from the aforementioned:

$$\ln(Q) = \beta_1 + \beta_2 \ln(P) + \beta_3 \ln(Y) + \beta_4 Y,$$

based on which the income elasticity is:

$$\frac{\partial Q}{\partial Y} * \frac{Y}{Q} = \beta_3 + \beta_4 Y$$

Both in the case of price elasticity and income elasticity, a static and dynamic model of defining income elasticity is used. Unlike the dynamic model, only the long-run and not short-run income elasticity can be established in the static model, although there is criticism of such a stipulation because the elasticity determined by the static model generally results in lower values than the dynamic models, so the elasticity determined in such a manner should be considered medium-run (Espey, 1998).

In addition to income elasticity of demand for petroleum products, income elasticity of demand for car ownership that also indirectly defines the demand for petroleum products should also be considered. It is assumed that households with higher income shall have more than one vehicle and that households shall therefore have higher price elasticity of demand than the poorer households with only one vehicle. In addition, the influence of the location is very important and the elasticity depends on the distance from the urban and regional centers.

4. CROSS ELASTICITY

Determining cross elasticity between fuel prices and demand for other goods is important since fuel demand is mostly non-elastic, so any increase in fuel prices leads to a reduction in disposable income that would be spent elsewhere, leading to a reduction in expenditure in all other categories.

Cross elasticity of demand refers to a measure that determines changes in demand for one good in response to a change in the price of another good. With regard to the obtained values of cross elasticity coefficients, there are substitutes, complementary and neutral goods. Substitutes are in question if the cross elasticity coefficient is positive - an increase in the price of a good causes an increase in the demand for another good, while complements are in question if it is negative - an increase in the price of one good causes a decrease in the demand for another good.

Neutral goods are goods for which a change in the price of one good does not affect the demand for another, which results in their cross elasticity coefficient being equal to zero.

The simplest calculation of the cross elasticity coefficient is provided in the following formula:

$$E_{A,B} = \frac{P_{B1} + P_{B2}}{Q_{A1} + Q_{A2}} * \frac{\Delta Q_A}{\Delta P_B} = \frac{\partial Q_A P_B}{\partial P_B Q_A}$$

where

$E_{A,B}$ is the cross elasticity coefficient,

P_B is the price of good B,

P_A is the price of good A,

Q_A is the quantity of good A in demand,

Q_B is the quantity of good B in demand,

and is explained by a percentage change in the quantity of good A in demand due to a percentage change in the price of good B.

A study conducted by a group of authors (Blum et al., 1988) found interesting results, and these authors were the first to identify a connection between the increase in fuel prices compared to the price of public transport. Cross elasticity of demand for gasoline in relation to the price of public transport amounted to 0.39, which means that a 10% increase in fuel price leads to a 3.9% increase in passengers using public transport. In the same study, the authors indicate that the accessibility of the transport infrastructure and its quality is crucial to fuel demand. In addition, they determined the influence of weather conditions, but in very low values. To determine the cross elasticity of demand between an increase in gasoline prices and the demand for public transport, it is important to determine short-run and long-run responses. If gasoline prices are expected to be high, and if there is an increase in the number of people in urban environments who decide to use public transport, the elasticity shall also increase. The opposite situation occurs when we expect the price increase to be short-run, and thus the cross elasticity lower.

The most important form of cross elasticity from this aspect is the one involving an increase in fuel prices and vehicle demand, which should be observed through its values, i.e. through the positive and negative value of cross elasticity coefficients. The nature of the impact of a fuel price increase on car demand is reflected in the cross elasticity of demand between more and less fuel-efficient vehicles. If we observe the impact of increasing fuel prices on the demand for more fuel-efficient vehicles, we notice that the demand is increasing and that the cross elasticity coefficient shall be positive, i.e. increasing fuel prices shall cause the demand for vehicles that are more fuel-efficient to rise. In the case of vehicles with a high level of fuel consumption, the increase in gasoline price shall lead to a decrease in their demand, meaning that the cross elasticity coefficient shall be negative, which is a common case in the relation between fuel price and less fuel-efficient vehicles since they present a vehicle segment with a demand most responsive to changes in fuel price.

There is a large number of studies dealing with cross elasticity research, i.e. establishing a link between fuel prices and public transport. The most significant among them is the study conducted by Blanchard (2009) on a sample of 218 American cities in the period from 2002 to 2008, during which price cross elasticity between four forms of public transport and gasoline price was established. Cross elasticity of demand for transport with regard to gasoline prices ranged from -0.012 to 0.213 for suburban railways, from -0.377 to 0.137 for heavy rail, from -0.103 to 0.507 for light rail, and from 0.047 to 0.121 for buses. He also found that cross elasticity increases over time, especially for buses and suburban railways, meaning that drivers became more sensitive to increases in fuel prices in the second part of the observed period. A similar study was conducted by Haire and Machemehl (2007), who found that each increase in gasoline prices of 1% leads to an increase in demand for public transport by an average of 0.24% on a sample of five major American cities. Currie and Phung (2007) established cross elasticity between public transport in the amount of 0.12 for all forms of transport, 0.33 for the railway and 0.04 for buses. Another interesting fact about this study is reflected in the observation of the influence of famous world events in order to prove a change in cross elasticity following them. Thus, the demand for suburban railways after the last Iraqi war increased by only 0.01% due to a 1% increase in gasoline price, which corresponds to scientific references claiming that the consumer response shall be weaker with regard to a short-run price increase, i.e. when the consumer does not expect that the price increase shall continue for a long time. A similar study in Europe was conducted by de Jong and Gun (2001), who established short-run and long-run cross elasticity for EU countries. They established a difference in cross elasticity due to an increase in prices in relation to the number of trips by public transport and the mileage traveled by public transport. Short-run elasticity for the number of trips is 0.33, the long-run is 0.07, while the short-run for the mileage traveled by public transport is 0.07, and the long-run is 0.10.

In their study, Nowak and Savage (2013) came to the conclusion that cross elasticity of demand between fuel prices and the demand for public transport depends on fuel price levels. Therefore, it varied in the period from 1999 to 2010, so when the gasoline price was less than \$ 3 per gallon, cross elasticity was also low and ranged from 0.02 to 0.05. When the gasoline prices were from \$ 3 to \$ 3.99 per gallon, cross elasticity also increased from 0.12 to 0.14. The peak in gasoline prices in 2008, when the gasoline prices were above \$ 4 per gallon, also caused the highest values in cross elasticity estimated at very high values of 0.28 to 0.30 for bus lines and 0.37 for suburban railway.

In addition to the fuel price and the demand for public transport, models also include other variables that may be affected by the fuel price, but are present to a lesser extent. The most interesting study was the study in which a negative correlation between gasoline price and body weight of the American population was established. Namely, any increase in fuel prices causes an increase

in walks or bike rides, and decreases the frequency with which people eat at restaurants, thus affecting the weight of individuals. A study (Courtemanche, 2008) showed that an increase in gasoline price by one dollar reduced overweight and obesity in the USA by 7% and 10%, while the 8% increase in obesity between 1979 and 2004 was the result of a decrease in real gasoline prices in the USA.

An increase in fuel prices also affects turnover in supermarkets whereby the turnover increases between 15 and 17% over a decrease in restaurant turnover by 45-56% since consumers respond by adjusting to a reduction in their real income due to increasing fuel prices by eating at home more frequently than they did before the increase in fuel prices (Gicheva and Hastings, 2007).

5. SHORT-RUN AND LONG-RUN EFFECTS

In order to differentiate between the driver response and the time for their adjustment, a distinction shall be made between short-run and long-run demand elasticity. Short-run elasticity measures the adjustment process during the first month, quarter or year, depending on the periodicity of the data, while long-run elasticity measures the overall adjustment that can refer to several years (Dahl and Sterner, 1991). Any period in which something remains fixed is considered short-run. In this sense, highway capacity, the efficiency of fleet fuel consumption, the location of employment, or anything else that slowly changes over time is considered fixed. Sufficient time for these features to change is considered long-run. In transportation planning, a term of approximately one year is usually considered short-run, however, the practical context in which the subject term is determined is much more important for such planning.

In the short-run, most consumers consider the goods they own as fixed and their replacement cannot be affected in the short-run. The increase in the price of petroleum products and energy certainly contributes greatly to the decision made by the drivers or the consumers to replace their vehicle with a new, more fuel-efficient model. In this case, the response time plays a crucial role in the flexibility of the consumer's decision. The longer the time, i.e. the greater the flexibility, the higher the likelihood of a response, i.e. the greater the demand elasticity. From the subject standpoint, the demand for petroleum products is the most striking example of driver response in the short and long-run. Namely, in the short-run the driver can change their driving habits, drive slower, avoid congestion, use public transport, carpooling, etc. due to an increase in petroleum product prices. However, if the increase in the prices of petroleum products is permanent, the driver shall react differently and replace the inefficient vehicle with a more fuel-efficient vehicle. This is referred to as the most important form of response to an increase in the prices of petroleum products in the long-run. Another form of response in the long-run is relocating to a place closer to the workplace to reduce travel distances. If the price remains high, vehicle manufacturers shall develop and produce more fuel-efficient vehicles. It is

therefore considered that driver responses in the short-run are mainly changes of behavioral nature, while substitutes in the long-run are of a material, tangible nature. Behavioral changes cannot be maintained in the mid and long-run. In this context, it is considered that price elasticity of demand is not the same when fuel prices increase or decrease, i.e. in case of a decrease in petroleum product prices, the consumers shall not sell more fuel-efficient vehicles and purchase less fuel-efficient ones. Consumers make their decisions on purchasing a vehicle based on predicting future energy, i.e. fuel prices.

Furthermore, if consumers were able to own fuel reserves and in the short-run decide to add fuel to the reserve or use fuel from the reserve in response to price changes, their response would be even more significant, but drivers have small gasoline reserves in their vehicle tanks, so this behavior is possible to a limited extent. Likewise, consumers may have the ability to postpone (or expedite) certain necessary trips in response to a temporary increase (or decrease) in the price. These types of behavior mean that the current fuel demand is determined by the price of gasoline today, but also by the price of gasoline a few days or weeks ago. Only when there is a reduction in the price of petroleum products, the drivers shall take these trips so that there is a shift in time, meaning that the current travel demand is also determined by gasoline prices in the past.

The results of an American study (Levin et al., 2013) indicate that the amount of gasoline purchased at a gas station one day after a 1% price increase is generally 1.45% lower than it would be without the price increase. Over the following three to four days, the consumption returns to its initial level, and the response is still visible after ten to twenty days after the price increase. Consumer behavior therefore significantly changes in the first days following a change in the prices, i.e. they purchase more gasoline during the first few days after a decrease in prices, ensuring themselves against another increase in prices, while they purchase less during the first few days after an increase in the prices and they wait to see if the prices decrease again before they make another purchase.

6. THE IMPACT OF FISCAL POLICY ON THE ELASTICITY OF DEMAND

With the aim of collecting as much tax revenue as possible, all governments impose the most tax on goods with a relatively non-elastic demand, since any increase in the price of such good shall not lead to a large decrease in customer demand. There is a difference between the taxation of fuel consumption by imposing certain standards that shall be followed when selling vehicles and the simple taxation of petroleum products.

The taxation of petroleum products is performed in order to reduce carbon dioxide emissions, climate change, insecurity due to oil supply and similar. The efficiency in implementing such tax policies depends on the reduction in the consumption of petroleum products, i.e. the elasticity of demand. The extent of such elasticity depends on

geographic, income and other factors. It has been proven that the rural population uses vehicles more than the urban because of the lack of alternative forms of transport, and the tax policy shall therefore have a different impact with regard to the location of the population. Due to an increase in the prices, households that own several vehicles use the more fuel-efficient vehicles, so the tax burden is not the same in that sense. Therefore, according to a study (Spiller and Stephens, 2012), it has been determined that the efficiency of implementation shall differ depending on the elasticity of demand that in turn varies with regard to several characteristics and demographic conditioning, including household income, number of vehicles owned, average annual mileage, distance from urban areas. It was thus established that a 10 percent increase in gasoline prices would have a 30 percent higher negative impact on the welfare of the rural population compared to the urban population. Given the high correlation between the quantity of driving and the distance, tax shall have a greater effect on people who live in distant areas and travel longer to work, which is generally a characteristic of rural households.

The justification for the taxation of petroleum products is often examined, since people with lower income also purchase fuel. According to Sterner (1990), petroleum product tax, although having certain characteristics of regressive tax especially in higher income countries, is progressive especially in lower income countries. Rich countries can compensate for the regressive effects of taxation of petroleum products by reducing other taxes affecting the poor or providing subsidies to low income groups. It is a well-known fact that low-income households spend a very small share of their money on fuel for transport. The problem occurs when increasing fuel prices cause an increase in public transport prices and transport costs that in turn increase the price of food.

According to the latest study (Li et al., 2012), in which the effect of fuel tax impact on gasoline consumption, the mileage traveled, choice of vehicle with regard to fuel-efficiency were analyzed in the short-run, a conclusion was reached that small changes in gasoline taxation could affect consumer behavior and that fuel taxes have an even greater impact on behavior than a proportional increase in gasoline prices resulting from an increase in oil prices. Accordingly, a five percent increase in retail gasoline prices by increasing taxes leads to a 1.3 percent decrease in consumption, which is more than the decrease in demand caused by increasing gasoline prices due to increasing oil prices amounting to only 0.16 percent. The reasons why consumers respond more to an increase in prices due to taxes than due to an increase in oil prices are as follows:

Consumer expectations on future petroleum product prices largely determine the consumer response to an increase in oil prices. The longer the period during which the consumers consider that the prices shall be high, the greater their response by reducing the mileage, using public transport more frequently and selecting more fuel-efficient vehicles.

Any change in taxes, especially petroleum product tax, attracts a lot of public attention and is subject to public discussions.

Precisely this could contribute to greater attention from the media posing a condition that a 5 percent increase in petroleum product tax shall receive more attention in the media and from the consumers than a regular increase in the petroleum product price in the same ratio.

With regard to determining whether the taxation of petroleum products has a progressive or regressive character, there is no unified standpoint in the references. Certain authors assume that the tax on the petroleum product consumption is progressive in the lower income population with a greater response to an increase in the prices, while the tax on the motor size or the subsidies for new vehicles are much more than regressive compared to the tax on the petroleum product consumption, while it has also been established that fuel tax is regressive only in households that belong to upper income classes (West, 2004). It is assumed that the reason for the aforementioned is the fact that a large proportion of lower income households do not own a vehicle and thus do not spend money on fuel, and lower income households are more sensitive to price changes than high-income households.

Other authors believe that lower-income households spend less of their income on gasoline than middle-income households, but that middle-income households spend more on fuel than households with the highest levels of income. Consequently, it is concluded that the tax on gasoline is less regressive than other analyzes indicated (Poterba, 1991).

7. CONCLUSION

With regard to the share of petroleum products in the structure of household expenses, as well as the share in the government budget revenues, the elasticities of demand for petroleum products are one of the essential elements for the implementation of the economic policy. The income elasticity of demand for petroleum products can offer insight into the extent to which the demand for petroleum products shall increase if the income of the population increases and what direct or indirect implications it shall have on the economy. On the other hand, price elasticity facilitates insight into the effect additional taxation of petroleum products and filling of the budget shall have with regard to the fact that the demand for petroleum products is non-elastic. In order to differentiate between the driver response and the time for their adjustment, a distinction shall be made between short-run and long-run demand elasticity. Short-run elasticity measures the adjustment process during the first month, quarter or year, depending on the periodicity of the data, while long-run elasticity measures the overall adjustment that can refer to several years. The taxation of petroleum products is performed in order to reduce carbon dioxide emissions, climate change, insecurity due to oil supply and similar. The efficiency in implementing such tax policies depends on the reduction in the consumption of petroleum products, i.e. the elasticity of demand. The conclusion that can be drawn from all the analyzed studies is that the elasticity of demand for petroleum products (price and income) has decreased over time.

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IMPORTANCE OF SERVICE QUALITY IN A COMPANY'S REGIONAL DEVELOPMENT – CHALLENGES AND OPPORTUNITIES

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ABSTRACT

Regional development contributes to a company's productive investment which can be seen in all business areas. An example of productive investments are acquisitions which also bring opportunities of internal potential development, infrastructure, computer technology efficiency, but also various challenges caused by organizational changes. Every company aims to regional development, but in order for a company to stay on the market it has to face challenges put in front of it as well as maintain the level of service provided. In this paper, we will touch base on regional development in a few examples of future acquisitions, and all challenges and opportunities which will be put in front of a company through acquisitions and especially in a challenge of accomplishments and quality standards implementation in order to accomplish the same level of service quality in new organizations. An organization will successfully respond with the help of economy models carried out through organizational plans and PMI plans. We will be using amended Parasuraman model of service quality measurement for service quality measurement. Challenges and opportunities are closely related because they interfere with each other and it is important to emphasize that every challenge has its successful solution model through PMI plans. That way, opportunities, or better yet – added values are created which will have an impact on regional development and in that way sustainable development which is a goal of every country.

KEY WORDS: organizational opportunities, quality, service quality development, regional development, Parasuraman model.

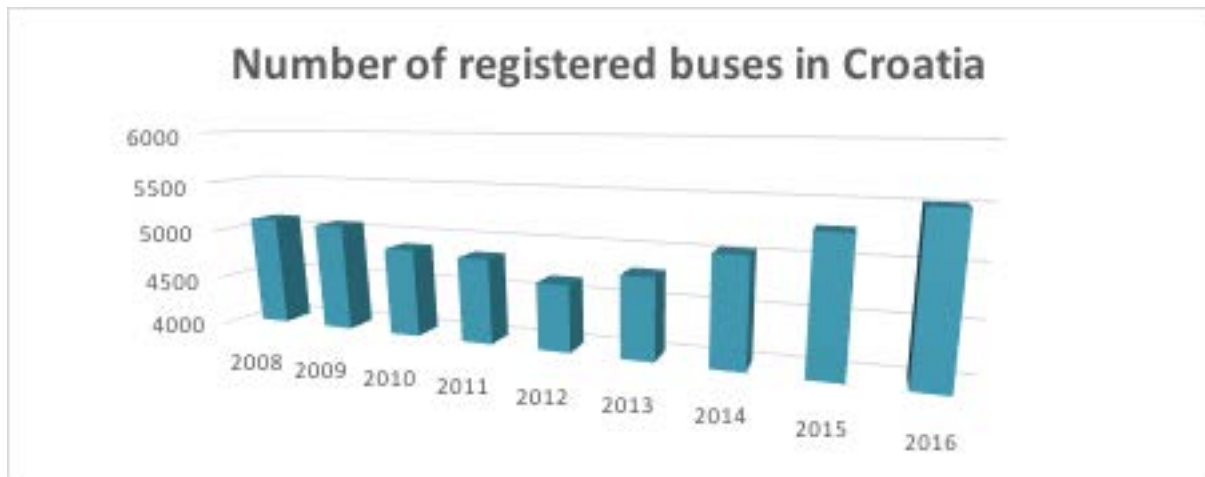
*The presented results are the outcome of the scientific project: The influence of concentration and competition on the efficiency and stability of firms in the retail sector (IZIP-2016-127) conducted with the support of the Josip Juraj Strossmayer University

1. INTRODUCTION

During the last decades there has been a lot of mergers and acquisitions in Croatia as well as in the world, with questionable result. In this working paper we will look at acquisition role and at merger of the companies in bus transportation, its integration, setting the goals by using Post Merger Integration (PMI) so the integration could increase total quality of the companies taken into account, and whose results we will monitor through future time as well as the influence on regional development of the company.

In the last several years in Croatia, the bus transportation started to change completely. Arrival of strong foreign competition and consolidation from one side, and arrival

of new start-up companies with innovative way of doing e-business, which do not own any buses, but have good implemented e-commerce to e-customer solutions that they offered to transportation companies with free capacities from the other side. Giving the fact that bus transportation business is low-profitable business, it is clear that turnover is very important as well as market share, and that is why we can expect that by liberalization of market there will be only few leading transportation companies left, and that would be those that have their own buses, and small companies will reorient themselves to low-cost services by using certain e-commerce solutions. We can also notice that in Croatia the situation has drastically changed in the period from the year 2008 to the year 2016 considering the number of registered buses and passengers driven.

Chart 1. Number of registered buses in Croatia from 2008 to 2016

Source: authors according to: „Državni zavod za statistiku RH“, Statističke informacije 2011-2017, Zagreb, str. 59-69

As one can notice from the Chart 1., according to statistical information from 2011 to 2017, the number of registered buses had been in decline until 2012, and from 2012 until 2016 it started to increase. In 2015 the number of registered buses surpassed number of registered buses in 2008 and is with tendency of growth. Bus transportation market has more and more important role in passenger transportation in Croatia, partly due to increase of international lines because of migration of passengers to other European countries, and also a great deal due to current situation in Croatian Railways Company.

2. ROLE OF POST-MERGER INTEGRATION IN MANAGING BUS TRANSPORTATION QUALITY

Mergers and acquisitions are happening based on the assumption that two merged companies will be worth a lot more than in the case they were operating as separate units, and weak effectiveness of successful merger is mostly dependant of human factor, cultural challenges and incorrectly managed post-acquisition integration phases.¹

Mergers and acquisitions are high-investment-volume transactions and they depend on many factors that can influence its success. That is why it is important to adhere to all set processes that are the key to success. If we look at the structure, in mergers and acquisitions we can differ three process phases. After concept-phase and transaction-phase, there is also integration-phase on which depends the whole result, i.e. success. Integration of the purchased company with the company that purchased it, comes to the last phase of process, and is at the same time the most difficult, the longest, and looking at the outcome of the result (success or failure), the key phase.²

In integration process, special attention has to be paid to implementing the standards of quality, and also to their regular follow-up by using Post-Merger Integration (PMI).

Below we will mention factors that are crucial for successful integration:³

1. New perspective for all employees

Each takeover of some company causes fear and insecurity of employees for their job and because of their changes. Therefore, important step of integration is to decrease fear and insecurity in the employees and to offer them new mutual perspective.

2. Maintaining independence and standardising structure

One shall not make changes in organisation and decrease freedom of functioning of Business Units. New system shall be implemented in standard structure of existing system and implement new roof central functions in order to establish structural compatibility and central reporting.

3. Transparency

When choosing staff for higher positions, one shall take into consideration their competences and professionalism, regardless the company they come from. In that way there will be sense of equality present within all employees.

4. Internationalisation of high-level staff

Holding regular meetings on higher levels, which include also employees from purchased companies. Involment is important, as well as the sense of belonging for all employees so they can take part and contribute to achieving new goals, vision and strategy on the level of one new system.

¹ Durand M.: Employing critical incident technique as one way to display the hidden aspects of post-merger integration, *International Business review*, 2015, str.1-16

² Marten K.U., Mathea M.: *Ausgestaltung der Pruefung einer Post-Merger-Integration*, Zfmc-Controlling&Management, 2009, str.19

³ Kramer J.: *Aus der Praxis: Erfolgsfaktoren der Post-Merger Integration*, Gruppendynamik und Organisationsberatung, Heft 1, 2006, str.79-84

5. On the way to mutual identity

At each merger there is one big central challenge existing, and that is how to create mutual identity. Here it is important for the new companies to understand that they need to separate from its identity and to take over new corporate identity.

To be able to follow the direction in which the acquisition and merger are going, as well as to measure its success, before the conclusion it is important to set up Post Merger Integration as the measure of successful merging and taking-over bus transportation companies, which is suggested below for bus transportation companies.

The following models in integration process are suggested, that we will be monitoring through certain period of time, and based on parameters, we will make conclusion regarding the success of increasing the quality and regional development of the company in the following scientific papers.

Table 1. PMI models in bus transportation

PMI 1 Corporate governance & Structure
Organisation structure
Real Estates
Client Relations
PMI 2 Commercial Transport & Tourism
Organisation of commercial department
Common pricing policy
Optimisation of regional transport
Tourist agencies
Define strategy for tourist agencies
Analysis and optimisation of business processes
Centralised sales management
Selling points and bus stations
PMI 3 Marketing & IT
Optimisation and integration transport
Common pricing policy
Optimisation and integration network (domestic, international and seasonal)
Implement common commercial reporting structure
Marketing
Define Marketing Strategy & Plan
Implement Brand and rebranding
Media - PR
Marketing strategy for the lines
Unified and set up common Web site & Social Media channels
Corporate web
Tourist Agency web
Social Media
Common Mobile App
Common loyalty system
Web sale - common web page
Bus selling tickets platform
PMI 4 Corporate Affairs
Communication

Internal communication plan & strategy
Intranet
Employees communication
External Communication
Vehicle
Stationary
Signage
Environment
Unified and set up common Web site& Social Media channels
Social Media
PMI 5 Engineering Fleet & Procurement
Engineering processes
Fleet
Equipment
Workshop
Procurement
Management and processes
Determine current procurement organization, rules and regulations
Plan further activities regarding collecting offers from supplier
Warehousing
Central contracts
PMI 6 Finance & Accounting
Accounting take-over
Procedures implementation in finance
Transfer pricing
Reconciliation of Accounting politics
Liquidity
Defining mutual function of financial controlling
PMI 7 Legal
Implementation of Legal reporting
Review of Court cases
Review of external legal costs
Compliance

Extraction Method: Principal Component Analysis.

Source: Authors

Passengers choose transportation according to certain characteristics and their personal needs, and choice of the type and sort of the vehicle depends on the passenger's needs, availability of transportation services provider, price of transportation services, velocity or time of transportation, safety and reliability of services, regulatory measures, safety in transportation and the whole concept of total service.

Therefore, suggested measures must be implemented and taken in the best possible way in order to keep confidence of existing customers, and to gain confidence of new customers considering the activities that are being taken on the market and looking at them by using PMI, as well as by consolidating market share on bus transportation market, setting for a goal to become the regional market leader in providing bus transportation services.

3. INSTEAD OF CONCLUSION

The most sensitive phase in acquisition and merger process is PMI phase. In order for PMI phase to be successful, besides employees' support we must also have clearly set plans and goals which must be implemented in accordance with persons responsible for each area. It is important, before the beginning of each PMI phase to define clear plans that must be measurable so one can follow in each moment the effectiveness of implementation in the new system. In PMI phase the most important factor is savings in all segments that needs to be shown through certain measure suitable to each PMI phase. Most common savings are related to implementation of mutual systems, purchase, real estate, optimisation of number of employees and making human resources in each sector stronger. At each acquisition and merger one shall not look exclusively through synergies that bring savings, but through revenue synergies that will bring additional and increase existing revenues as well.⁴

Strength of each successful organisation is in its human potentials, and that is specially applied to organisations that are providing passenger transportation services. Quality of service is crucial for passenger, and driving staff

has important role in achieving recognizable quality of service together with all other elements. In order to achieve the level of quality that is required by implementation of acquisition, the system of total quality management through system of enhancement, increase of flexibility, effectiveness and efficiency of services and each activity is needed. System of total quality control tries to ensure, create conditions that all employees reach one maximal effective and efficient goal by using mutual forces, create product and provide service at the time, on the place and in the way expected by a customers, and by that, it is meant the first and each following time.⁵

In order for mergers and acquisitions in bus transportation to be successfully implemented based on a model that we explained in our work, in our future research that we will conduct with certain time gap, we have to check efficiency of set standards in companies integration based on which we will be able to give measurable resume of implemented activities and finally give instructions related to success/failure of mentioned model of acquisition and merger in bus transportation.

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⁴ Giannopoulos M., Koufopoulos N. D.: The impact of post-merger integration on cost savings: the case of Greece, *J. Global Business Advancement*, Vol. 7, No. 4, 2014., str. 318.

⁵ Jurčević J.: Uloga upravljanja ljudskim potencijalima u unapređenju sustava kvalitete, *Poslovna izvrsnost*, Zagreb, 2007, Br. 2, str. 104

THE IMPORTANCE OF THE PROCEDURES FOR THE AWARD OF CONCESSIONS FOR MARINAS IN THE REPUBLIC OF CROATIA – DE LEGE LATA ET DE LEGE FERENDA

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ABSTRACT

This article analyses the award of concessions procedure for marinas in the Republic of Croatia, de lege lata (the current law) and de lege ferenda (the law that is to be proposed) and gives measures for improving the valorisation of the maritime domain.

Croatia is one of the most desirable nautical destinations in the world due to its natural resources (climate conditions, beautiful landscape, 6278 km of coastline with 1185 islands, rocks and reefs), good infrastructure, quantity and locations of the nautical tourism ports and personal safety.

Croatia's tourism development strategy to 2020 identifies nautical tourism as one of the main strategic target. For this reason, it's important to efficiently manage the natural resources including the maritime domain as one of the most important Croatian strategic resources. Maritime concessions serve as a vehicle of economic development and allow supervision over the use of the maritime domain in order to protect it. The award of concessions for marinas is regulated by legal acts which will be analysed in this article.

KEY WORDS: Croatia, nautical tourism, maritime domain, concessions, marinas.

1. INTRODUCTION

Nautical tourism is one of the most promising types of tourism in Croatia, with demand growing year after year. In order to take advantage of the great development potential of nautical tourism, investments need to be made in marinas construction, including supporting facilities constructions.

The Croatian coast is 6,278 km long, of which is 4,398 km the length of the islands' coast, with a total of 1244 islands, islets and reefs, of which 50 are inhabited. The inner sea waters and territorial sea extend on a surface amounting to 31,479 m², the surface area of inland waters is 12,498 km², the territorial sea is 18,981 km², and the surface of the Republic of Croatia is 56,488 km². Due to its significance and the surface, maritime domain is one of the most valuable parts of the territory of the Republic of Croatia.

It is in the common interest of state bodies, as well as of all those who work in maritime domain or live of it, to regulate business terms applicable to maritime domains for a longer period of time and thus create certain and foreseeable business terms that are prerequisites both for the improvement of current business and for new investments.

Croatia is one of the most desirable nautical destinations. The reasons are:

- Natural background: climatic conditions, sea quality, landscape beauty, indented coast and islands, ecologically preserved coastline
- Traffic accessibility of the nautical tourism port of departure in relation to the main emissive markets, personal safety and navigation safety, number, spatial distribution and equipment of nautical tourism ports,

The development of nautical tourism has been identified as one of the strategic goals in the tourism development strategy of the Republic of Croatia by 2020. The main goal of the Tourism Development Strategy of the Republic of Croatia until 2020 is to increase the attractiveness and competitiveness of Croatian tourism. With the dominant “sun and sea” product, the Strategy also mentions nautical tourism as a particularly important product for the development of Croatian tourism by 2020. According to the strategy, the strategic goals of tourism development by 2020 are: Improvement of structure and quality of accommodation, new employment, investments and increase of tourist consumption. The desired position for Croatian nautical tourism sector in 2020 is for Croatia to be the most desirable yachting destination in the Mediterranean, and to meet the demands of luxury mega yachts.¹

2. NAUTICAL TOURISM IN CROATIA

The entire tourism sector in the Republic of Croatia has a seasonal character and so does the nautical tourism. The largest number of vessels in Croatia was recorded in the summer months, mainly in July and August.

In 2016, according to the Croatian Bureau of Statistics, there were 139 nautical ports on the Croatian coast, of which 71 marinas - 13 land and 58 others. There were 58 anchorages, 7 moorings and 3 are unclassified). The total number of moorings is 17,428²

Table 1. Nautical tourism ports capacity by counties in 2016 (number of moorings)

COUNTIES	Total	Sea	Land
Primorje-Gorski Kotar	2,891	1,403	1,488
Zadar	3,966	3,085	881
Šibenik-Knin	3,671	2,721	950
Split-Dalmatia	2,451	1,848	603
Istria	3,512	2,760	752
Dubrovnik-Neretva	937	731	206
TOTAL	17,428	12,548	4.880

Source: NAUTICAL TOURISM Capacity and Turnover of Ports, 2016, http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, p. 2 i 3

The Zadar County has the highest number of moorings 23% of total moorings (3,966) followed by Šibenik-Knin 21% (3,671), Istria with 20% (3,512), Primorje-Gorski kotar with 17% (2,891), Split-Dalmatia with 14% (2,451) and Dubrovnik-Neretva with only 5% (937). It needs to be said

that the number of berths in Zadar County is divided into 30 anchorages, 2 moorings and 12 marinas. It is also the county with the largest number of anchorages (30 out of 58 in Croatia). It should also be noted that Primorje-Gorski Kotar County has the largest number of land marinas, 5 out of 13 in the Republic of Croatia. This is evident in a larger number of places on the land (1,488) than the moorings in the sea (1,403).

Table 2. Number of moorings by vessel length in 2016.

Length	Number of vessels	%
Up to 6 m	606	3.5
6 - 8 m	1,276	7.3
8 - 10 m	2,821	16.2
10 - 12 m	4,449	25.5
12 - 15 m	4,848	27.8
15 - 20 m	2,666	15.3
20 m and more	762	4.4
Total	17.428	100.0

Source: NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, p. 2

The largest number of moorings is in the category 10 - 15 m (9,297). The share in the total number of moorings is 53.3%. The share of moorings for vessels over 20 m is only 4.4%

Given the market trends that indicate an increase in the average length of the vessel and the high utilization of the leading marinas in the Mediterranean, it is expected that demand in the Adriatic will follow the market trends. According to the placed superyachts orders, there is an increase in demand and increase of the average length of vessels. According to Superyacht Intelligence Group, the number of superyachts (30m +) is increasing. According to the same source about 60% of the global fleet of superyachts is permanently moored in one of the Mediterranean marinas.

There is a continued growth in global superyacht fleet. Although the total fleet of superyachts grew slower in years after the global economic crisis, the number of vessels in the fleet is constantly increasing, which is why demand for suitable moorings and new moorings is expected to also be increased. According to the new orders, it is possible to expect a continuation of this trend in the years to come, and the demand for the mooring of the above mentioned length categories is expected to increase with it.

According to the Nautical Tourism Development Strategy of the Republic of Croatia for the period 2009 - 2019, 15,000 new moorings (10,000 water and 5,000 land ones) are planned.³ Realization is slow. Capacity in nautical

¹ Vlada RH: Strategija razvoja turizma Republike Hrvatske do 2020. godine (travanj 2013.), <http://www.mint.hr/default.aspx?id=9504>, 25.07.2017.

² NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm

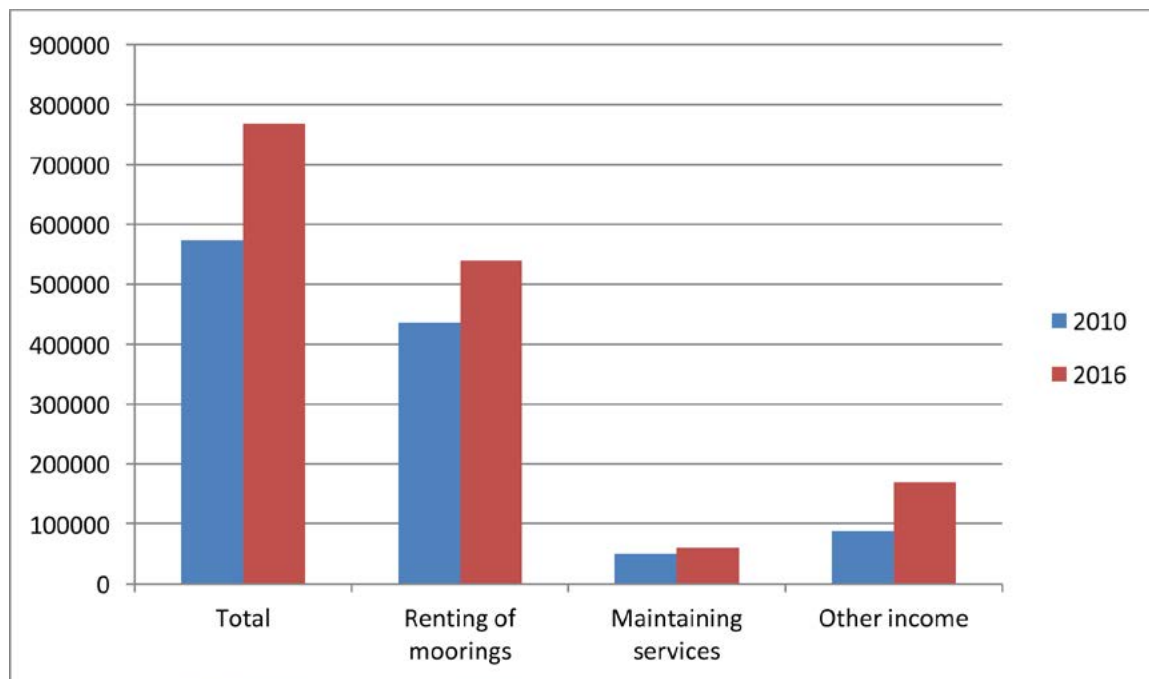
³ Vlada RH - Strategija razvoja nautičkog turizma za razdoblje 2009.-2019., <http://www.mint.hr/default.aspx?id=375>, 26.09.2017.

ports increased only by 580 moorings between 2009 and 2016 (2009 – 16,848 and 2016 – 17,428).⁴ As the length of vessels increases, it is not possible only to consider the number of moorings but the length as well.

Total income in nautical ports has been growing steadily over the last five years despite a decline in the number of

vessels in Croatia. The possible explanation for such trends is that number of smaller vessels is actually reducing, while the number of vessels longer than 20m is slightly increasing, which is again in line with the global trend of increase in the average length of vessels. In addition, the average length of the vessel's stay in transit in the nautical tourism ports in Croatia is increasing.

Figure 1. Income realised by nautical ports, not including VAT in 2010 and 2016 (in HRK 000)



Source: NAUTICAL TOURISM Capacity and Turnover of Ports, 2010 https://www.dzs.hr/Hrv_Eng/publication/2010/04-04-05_01_2010.htm, 25.07.2017.; NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, 25.07.2017.

The total realized income of nautical ports in 2016 amounted to HRK 769 million, of which HRK 539 million was realized from renting of moorings, 70.1% of total income. Compared to 2015, total income increased by 2.1%, and leasing income increased by 3.8%.

The total realized income of nautical ports in 2010 amounted to HRK 574.1 million, of which HRK 435.9 million was realized from the leasing of the moorings, 75.9% of the total income.

In the 2010–2016 period nautical tourism income increased by HRK 195 million or around 34%. In the observed period, the share of income from leasing moorings is decreasing, and it is growing from maintenance services and other services.

The largest income of nautical tourism in 2016 is recorded by the Šibenik-Knin County. Zadar is in the second place, although it has the largest number of moorings, just a bit in front of Split-Dalmatia County, which is penultimate by the number of moorings.⁵ The fact that anchorage moorings

are included in total number of moorings, and there are 30 in Zadar County, has an impact on the income.

There were 13,422 vessels permanently moored in nautical ports on 31 December 2016, which was 0.2% more than on 31 December 2015. Water moorings were used by 87.6% of the vessels, while 12.4% used only land moorings. There were 198,151 vessels in transit in nautical tourism ports in 2016, which was 8.6% more than in 2015.⁶

After the decline in the number of vessels permanently moored in 2015, there is a growth again in 2016. The number of vessels in transit is steadily increasing.

The influence of nautical tourism on the destination is the subject of many studies in Croatia due to the relatively rapid development, the impact on the environment and the economy in recent years. The results of the research of “TOMAS NAUTIKA Jahting” published by the Institute for Tourism, dealing with the attitudes of yachtsmen in Croatia, point to the importance of the development of nautical tourism for the destination. Year-on-year increase

⁴ NAUTICAL TOURISM Capacity and Turnover of Ports, 2009 https://www.dzs.hr/hrv/publication/2009/4-4-5_1h2009.htm; NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 https://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, 29.09.2017.
⁵ NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, 25.07.2017.
⁶ NAUTICAL TOURISM Capacity and Turnover of Ports, 2016 http://www.dzs.hr/Hrv_Eng/publication/2016/04-03-04_01_2016.htm, str. 1

in economic and non-economic impacts is noted, such as: increase of income in the destination, employment, expansion of offer, increase of economic activity etc.

According to the last available study „TOMAS NAUTIKA Jahting 2012“ yachtsmen were, during the summer 2012, the most satisfied with the beauty of nature and scenery, and personal safety; they were also satisfied with hospitality and availability of information in marinas, vessel's condition and transport at airports and in marinas for charter guests as well as gastronomy offer in destinations, accessibility of departure port, geographical spread of marinas and overall nautical product; they were not entirely satisfied with value for money of the overall nautical product; yachtsmen were unsatisfied with the shopping facilities in marinas. The main disadvantage of Croatian nautical product, compared to Spain, France and Italy, are the charter service, availability of transit moorings and supply of marinas. Value for money of the overall nautical tourism product is higher compared only to Italy. The analysis of competitiveness of Croatian nautical tourism product in comparison to other Mediterranean destinations showed that the main advantages are environmental preservation, natural beauty, climate, clean sea and tidiness of coastal towns, safety, friendliness of hosts, image of the country and the geographical spread of marinas.⁷

3. THE PROCEDURES FOR THE AWARD OF CONCESSIONS FOR NAUTICAL PORTS IN THE REPUBLIC OF CROATIA – DE LEGE LATA ET DE LEGE FERENDA

Concession encompasses the right by virtue of which a part of maritime domain is partly or entirely excluded from general use and conceded to natural and legal entities for special use or commercial exploitation.

The law distinguishes general, special and economic use of maritime domain:

- General use of maritime domain, meaning that anyone has the right to use maritime domain according to its nature and purpose.
- The special use of maritime domain is any use other than the general or economic use of the maritime domain

The main goal of the award of concessions is ensuring balance between the protection of the maritime domain and its economic use. Other goals are:

- creating conditions for investment in maritime affairs, especially in port superstructure
- respect and promotion of the highest standards regarding environmental protection of the maritime domain
- Systematic and precise legal regulation that monitors contemporary, generally accepted European and world achievements, to provide the necessary preconditions for economic development

- Re-examine port management models open to public traffic

The Legal acts governing the award of a concession for the use of the maritime domain are: The Constitution of the Republic of Croatia, The Concession Act, Maritime Domain and Seaports Act, Regulation on the Determination of Maritime Boundary, Regulation on the procedure for granting a concession on a maritime domain and Regulation on procedure for granting concession permits.

The concession contract for the right to exploit a common good or other goods is a contract which regulates the exploitation of a common or other good of interest to the Republic of Croatia, defined as such by the law.

CONCESSION AWARD PROCEDURE

The Maritime Domain and Seaports Act applies to this matter (Official Gazette No. 158/03, 141/06, 38/09, 123/11, 83/12 and 56/16), the Concession Act (Official Gazette 69/17) and the Regulation on the Concession Procedure of the maritime domain (Official Gazette No. 23/04, 101/04, 39/06, 63/08, 125/10, 102/11, 83/12 and 10/17).

PRECONDITIONS FOR AWARD OF CONCESSION:

1. Determined boundaries of maritime domain;
2. Maritime domain is noted in official land registers;
3. The activity planned to be performed on the basis of the concession must be provided in a detailed adaptation plan or a location permit must be obtained.

CONCESSION GRANTORS:

1. Government of the Republic of Croatia – for use or construction of buildings of importance for the Republic of Croatia - up to 50 years - for over 50 years approval of the Parliament of the Republic of Croatia is required.
2. County Assembly – for use or construction of buildings of importance for the county - up to 20 years - exceptionally with the approval of the Government of the Republic of Croatia, the county assembly may extend the duration of the concession for a total of 30 years.
3. Special purpose ports –for up to 200 moorings the concession grantor is the County Assembly and over 200 moorings The Government of the Republic of Croatia.
4. Port administrations open to public transport grant concessions in the port area as the port area represents the maritime domain in accordance with the provisions of the Law - for a period of 30 independently, for a period of 30 to 50 years with the approval of the Government of the Republic of Croatia, for a period of 50 to 99 years with the approval of the Parliament of the Republic of Croatia.

⁷ Institut za Turizam, TOMAS NAUTIKA Jahting 2012“ <http://www.iztg.hr/hr/institut/projekti/istravanje/>, 12.09.2017.

ISSUING NOTICE OF INTENT TO AWARD A CONCESSION ON MARITIME DOMAIN

Based on:

- Investor's letter of intent;
- Court proclamation of maritime domain that is also noted in land registers;
- A statement from a detailed adaptation plan or a location permit;
- Letters of intent by a bank to cover the investment or other evidence of availability of sufficient financial resources for the realization of the project.

PUBLIC INVITATION FOR COLLECTION OF BIDS

When Government of Republic of Croatia is concession grantor, procedure is conducted by the Ministry handling maritime affairs. When the concession grantor is a County Assembly, the procedure is conducted by the county administrative authority.

The offer must contain following documents:

1. proof of tenderer's capacity (that it is registered for carrying out the economic activity for which he is seeking a concession, to have adequate technical, professional and organizational capacity for utilization of the potentially conceded goods, to have a guarantee for the undertaking of the plan and program needed for the realization of the concession, that there are no unsettled liabilities from previous concessions, That he has not been deprived of awarded concessions so far etc.);
2. The offered amount of a permanent part of the concession fee and the percentage of the variable part of the concession fee;
3. Economic justification study;
4. Commercial guarantee issued by a bank as a guarantee of serious intent by a bidding party in the amount of 1% of the offered value of the investment;
5. Letter of intent issued by a commercial bank to pledge the fulfilment of obligations under the concession contract;
6. Certificate of the competent authority for issuing the location permits that the project presented in the draft project is planned in accordance with the physical planning documents;
7. Conceptual design for the intervention in maritime domain created in accordance with the documents of physical planning and the economic justification study.

In addition to the mandatory content of the offer, the bidder is obliged to submit other data, based on published conditions of public collection of bids which may alter.

CONCESSION AWARD DECISION

Concession Act accounts for selection of criteria: quality, which includes technical merit, aesthetic, innovation, functional and environmental characteristics, running costs and management costs, cost-effectiveness, after-delivery service and technical assistance, delivery date and delivery period or period of completion of works, price of the service for the final beneficiaries, the amount of the concession fee, or highest fee offered for the concession.

Maritime Domain and Seaports Act will differentiate the criteria in relation to the type of concession, taking into account previous experience.

The submitted bids are evaluated by the expert commission for the evaluation of the Bid for Concession and they propose the most favourable one (the expert commission for the Evaluation of Bids for Concessions awarded by the Government of the Republic of Croatia acts in the Ministry of Sea, Transport and Infrastructure and it is appointed by the Government of the Republic of Croatia).

The Ministry of the Sea, Transport and Infrastructure prepares a proposal for a concession award decision and submits it to the competent state administration bodies for the purpose of giving an opinion. Upon receipt of the opinion of the competent authorities, the proposal of the Decision is submitted to the Government of the Republic of Croatia for the adoption of the Decision.

The Government of the Republic of Croatia / County Assembly issues a concession award decision. Based on these concession award decisions, a concession contract is concluded.

The concession contract is the basis for obtaining a building permit and the realization of the project.

According to The Concession Act legal protection is ensured in accordance with public procurement regulations, which means that disputes are solved by the State Commission for Control of Public Procurement Procedures.

The procedure for issuing notice of intent to award a concession on a maritime domain and the very procedure for granting a concession for the use of a maritime domain is a lengthy and complex process.

For this reason, the limitations noticed in the procedure need to be continually eliminated by drafting addendums to the regulations, and some of them are:

- Inaccuracy of Physical Planning Documents;
- Lengthy duration of the process of establishing the limits of the port itself;
- Entering designated port area in the land register in the status of maritime domain;
- Planning all activities within the port area;
- Justification studies for granting the concession, which do not foresee different possibilities of using the port area during the concession.

According to the new Maritime Domain and Seaport Act it is proposed to change the jurisdiction and the concession-granting procedure in the maritime domain in order to comply with Concessions Act, as well to implement means to decentralize maritime management.

The subdivision of the concession on the maritime domain is aligned with the Concession Law, which establishes:

- Concession for the right to exploit a common good,
- Works concession,
- Services concession.

It also defines the approval for the special use of the maritime domain. The concessionary permit is abolished; the permit for carrying out activities on the seashore, which is an administrative act, is being issued by the mayor, thereby strengthening the role of local government in the management of maritime domain.

4. CONCLUSION

Mediterranean is the most popular nautical tourism destination. The fact that more than 60% of the global fleet of superyachts is permanently moored in one of the Mediterranean marinas, and that almost all of the most

expensive marinas in the world are in the region, speaks for the Mediterranean as the most popular nautical tourism destination. The congestion of capacity in the traditionally most popular countries and on the islands of the Western Mediterranean is evident, which is an opportunity for the surrounding countries including Croatia to offer an alternative location of moorings and attracting yachtsmen by offering more peaceful, undiscovered sailing areas and / or better infrastructure.

Croatia needs to use resources and great potential for further development of nautical tourism and position itself as one of the most desirable nautical destinations in the Mediterranean. To that end, it is necessary to undertake activities to improve the offer and increase the attractiveness of products for users/visitors and investors, and to continuously work on improving the procedures for granting concessions on the maritime domain.

Warning measures for improving the valorisation of the maritime domain are: strengthening both the general and individual awareness about the importance of the coastal belt; regular review of concession conditions; systematic settlement of the entry of the maritime domain in land registers; by acknowledging the specialty in the economic use of the maritime domain of various subjects (traditional from economic use).

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MARKETING IN CROATIAN FEATURE FILM – EXPLORATIVE RESEARCH

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ABSTRACT

Croatian cinematography and Croatian feature films in general are not achieving great success neither in terms of viewership, especially when it comes to box office, nor in terms of recognition and reputation and are seen by the public as inferior to foreign movies, particularly American movies. Despite the rewards they are receiving at festivals in Croatia and in the rest of the world, the general perception of public and even among the members of profession is negative. In regards to that, the aim of this paper, of this research, was to find the answer whether marketing can be helpful in achieving the better success of Croatian feature film, what the role of marketing in the film industry really is or can be. Throughout the paper it was hypothesized that marketing isn't applied neither enough, nor systematically nor correctly, in Croatian film industry and that better, more correct and systematic, implementation of marketing would help Croatian feature films achieve much greater success in terms of viewership, recognition and reputation. Moreover, it would help Croatian film industry in the long run to gain much better reputation and recognition both in the film world and among general public.

Concerning the research, the research was carried by interviewing 20 experts on the Croatian feature films and films in general that were specifically chosen by the author on the basis of their knowledge in the matter and their professions. Among the participants were film critics, distributors, cinema owners, directors, producers, film theoreticians and academic professors with a Ph.D. in film art. Through interviews with them obtained was the qualitative insight into the state of Croatian film industry, Croatian feature films and marketing in Croatian feature films, as well as insight into trends related to those.

KEY WORDS: Croatia, marketing, film, experts, explorative research.

1. INTRODUCTION

Croatian cinematography and Croatian long feature film in general are not enjoying much success not just in box office, which is essential, but also in viewership in general, nor are they enjoying great reputation and recognition. Indeed, the general Croatian public perceive Croatian long feature films negatively, as inferior to foreign films, especially inferior to American films. Moreover, despite the awards Croatian long feature films receive at festivals in Croatia and around the world, they are not regarded among the general Croatian public while Croatian cinematography is not perceived and considered as important branch of the economy. With regards to that, research about Croatian feature film was carried out. The aim of the research was to find the answer whether better (more systematic, more correct) implementation of and approach to marketing and bigger role of marketing concept in Croatian feature film would help it achieve better results, in terms of

viewership, reputation and recognition. Thus, the problem of the research was to find out the perceptions and thoughts of the experts related to Croatian feature film and implementation of marketing and marketing elements in Croatian film.

Film marketing, as John Durie defines it, is “any activity which helps film reach its intended audience in any moment of its life (product life cycle), that is reach its potential for earning profits.”¹ Francois Colbert, on the other hand, states the goal of marketing in culture is to „facilitate establishing the connection between art work and audience that will appreciate it“² Marketing, in general, is defined, by the American Marketing Association as „activity, set of institutions, and processes in creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.“³ Offerings include, per definition, any product which in turn includes audiovisual works (in this case long feature

¹ Kerrigan F. (2010) *Film Marketing*, Bulterworth-Heinemann, Oxford, p. 10. – adapted, from the source: Durie, J. et. al. (2000) *Marketing and Selling Your Film around the World*, Silman-James Press, Los Angeles

² Colbert, F. (2010) *Marketing u kulturi i umetnosti*, Clio, Beograd, p. 10.

³ <https://www.ama.org/AboutAMA/Pages/Definition-of-Marketing.aspx> (17.10.2017.)

films), and not just as a standard physical product but also as an art and culture product in which authors instill their own opinions, ideas, thoughts which may or may not be liked by the viewers, that is consumers. In this regards, as authors of the paper *Strategic Approach to Film Marketing in International Setting (Strateški pristup marketingu filma u međunarodnim okvirima)* point out the role of marketing is “to influence decision-making in terms of where the money will be invested, which film is going to be shot, how distributors will be found and how the budget and strategy of showing the film to intended target audience will be established. Film marketing should be based on the public’s expectations of the film.”⁴ However, when discussing marketing in Croatian feature film and Croatian film industry in general, it can be said how film marketing is underdeveloped, or how it is rarely applied, in overall. Only in recent times there are some examples of adequate implementation of marketing which as a consequence had good succes of these films, but they remain few and far between.

Therefore, the aim of the paper was to show that implementation of marketing can help Croatian feature film, and, in accordance to the problem of the research, the following research hypotheses were defined:

H1 (Main hypothesis): Inadequate marketing approach in production and decision of scenario/project results in comparatively lower production quality, and thus in effect in lower appreciation of Croatian film by the public (market approval) in comparison with foreign films (especially of American production).

Auxiliary hypothesis 1: From the point of the producers (business subjects) and authors in film industry, the opinions that dominate are those that due to insufficient budgets the increasingly less-demanding scenarios/projects are developed and, as a resort, the artistic (art) films without commercial potential are made.

Auxiliary hypothesis 2: Due to small earnings from the distribution and due to insufficient budgets for film promotion and lack of insight into habits of Croatian viewers, the poorer results are achieved in viewership of Croatian feature films.

Auxiliary hypothesis 3: Consumers (wider public) perceive overall national cinematography as not of sufficient quality in terms of genres and themes, while particular Croatian films (film titles) they value more. Consumers are also not familiar enough with all the forms of usage of the audiovisual works (screening, airing...).

Auxiliary hypothesis 4: Croatian cinematography and audiovisual industry (film industry) are not recognized as a branch of economy that employs a lot of people, although it is clear that film can promote country as touristic destination and contributes to the image of the country.

Auxiliary hypothesis 5: Overall audiovisual industry, especially cinema infrastructure, negatively affects the visibility and accessibility of national (domestic) film to the cinema public.

2. METHODOLOGY

Methodology used for the research about marketing in Croatian feature film was based on interviews with experts on Croatian feature film and films in general. The author of the paper, himself from audiovisual industry, personally interviewed the experts. For the purpose of this paper and research, and in accordance to aims and hypotheses of the paper, the interview guide was devised as a research instrument. With the help of this instrument interviews with the experts on films and experts from film industry were carried out. Main goal of this research was to get expert, precise, deep and wide insight into the state of Croatian feature film.

Twenty experts participated in the research. The research was conducted in the period of: end of year 2015 and first quarter of year 2016. In accordance to ethical research practices the experts were guaranteed anonymity. The interview guide – research instrument - can be found in the appendix: *Research carried out on the sample of experts of Croatian film: interview – questions.*

The field of research consists of the following:

- reputation (image) and viewership of Croatian film
- marketing in Croatian film and viewership (how marketing is applied in Croatian film, what effect it has in terms of diverse aspects of marketing and similar)
- state of Croatian cinematography
- importance of Croatian film industry as economic industry
- state of Croatian film

3. SAMPLE

Participants were chosen on basis of their expertise and knowledge on Croatian film and their diverse professions, all in order to cover as much fields in audiovisual industry and to gain as broader, deeper and better insight into state of Croatian film as possible. Thus, among the interviewed experts there were: film critics, distributors, cinema owners, directors, producers, cameramen, film theoreticians and academic professors with a Ph.D. in film art. Their opinions and answers are shown and analyzed in the research results in next part of the paper and on the basis of that the main conclusions are drawn out. Author of the paper chose experts based on his judgment of their knowledge, insight and expertise, in consultation with his mentor and co-mentor. It is clear from that the sample is purposive or convenience sample, consisting of twenty participants.

⁴ Štavljanin V., Miličević V. i Makuljević J. (2011) *Strateški pristup marketingu filma u međunarodnim okvirima*, Marketing: časopis za marketing teoriju i praksu, vol. 42., no. 2, str. 89-96; str. 90., free translation

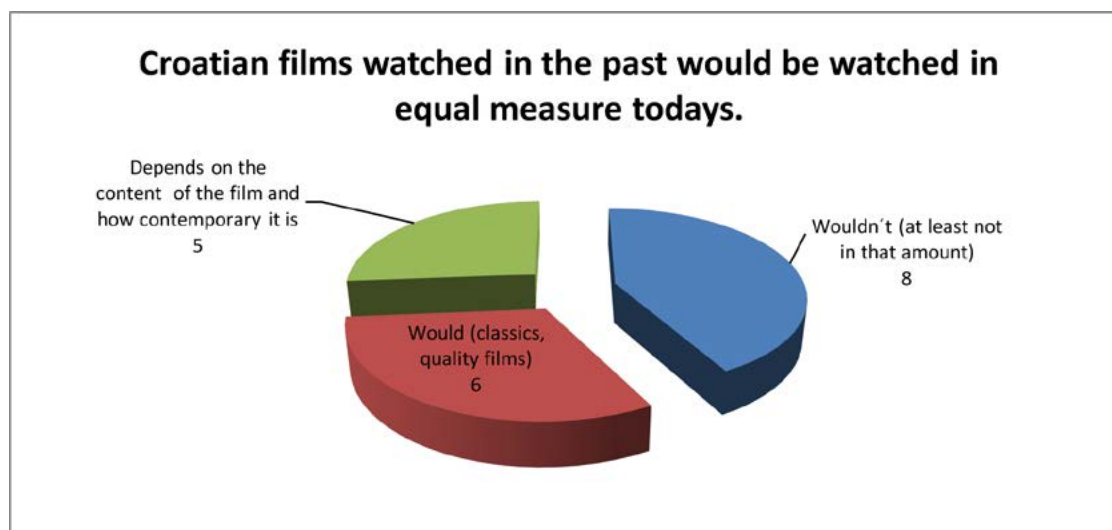
4. RESULTS OF RESEARCH

Reputation (image) and viewership of Croatian film

Related to viewership of Croatian film the majority of experts think that Croatian movies watched in the past wouldn't be watched in equal measure today. However, on the other side, some experts are of a thought that they would be watched, under the condition that they were Croatian film classics or successful, quality films. Interesting is the opinion of one participant who mentions the problem of accessibility of Croatian film classics to audience due to unsystematic network of cinemas as well

as need to distance from confusing *art* projects and to get closer to audience with films that have contemporary themes and stories. That would then increase viewership of Croatian films, in his opinion. Certain number of experts is of opinion that it depends on the content of the film and how much the movie is current (contemporary) for nowadays, on the momentum, context, but also on audience's profile and its current (today's) taste. One expert summarizes majority of opinions: "No, it wouldn't be equally watched. The habits of watching movies have changed, the structure of cinema public has changed, the economy has changed... I think they would be watched much less."

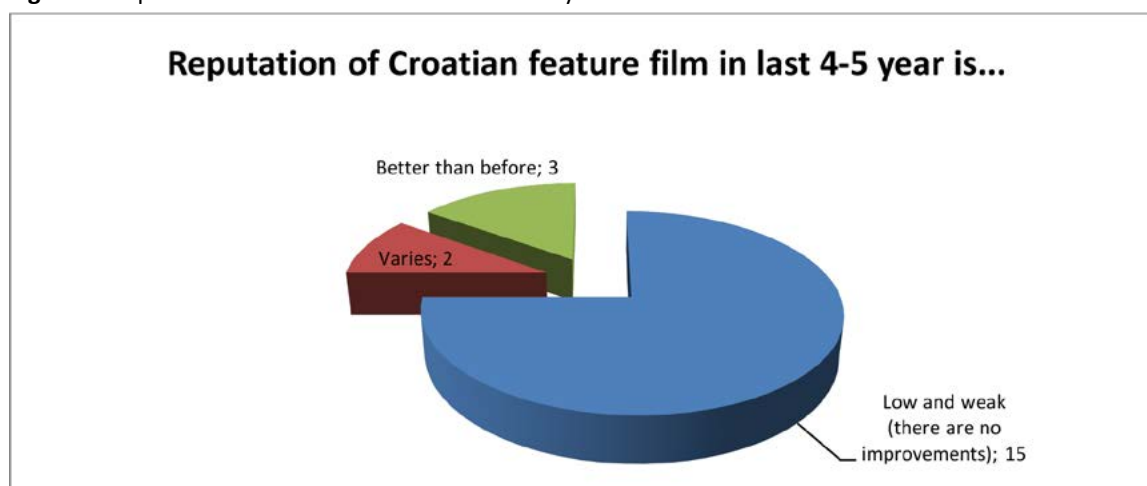
Figure 1. Viewership of Croatian film today and in the past



Source: Authors

Regarding the reputation (image) of Croatian feature film in last 4 to 5 years, the majority of experts think that reputation (image) is as poor and low as it was in 1990s and that public still doesn't trust Croatian film. However, bearing in mind that, according to some there are some indications that the image, that is reputation is slightly improving, albeit slowly. Only small number of experts holds that the image has improved greatly in last 4 to 5 year, and mostly thanks to several titles with significant success among the public and more positive reactions, but also with quality repercussions at international festivals of A category, including the three greatest: Cannes, Berlin and Venice. Some experts think that reputation varies, that is that image is not constant and that, according to one, this lack of continuity is the main problem in regards to improving the reputation. Reasons why majority of experts think that reputation of Croatian film in last 4 to 5 years is bad are the following: themes of the films (excess of war movies as a consequence of 1990s), inconsistency in quality and scenarios, too many social dramas and not enough diversity in genres, old-fashioned films, lack of quality and authenticity, bad PR, stigma of boredom that follows Croatian film, and as one expert put it: "...overestimating the importance and auctioning the success

at usually less important festivals." However, one of the experts who think reputation is bad, holds that bad reputation is ungrounded because of tendency to speak badly about domestic film without even being familiar with it and watching it. Moreover, according to one expert "production is diverse, often very ambitious, technologically truly impressive." According to him today's image, still primarily poor, was built on poor image in 1990s, when the image founded in public was that Croatian films are uncommunicative and amateurishly realized works. Other expert however praises the organizational improvement made by HAVC (Croatian audiovisual center), but states how HAVC is only recognized among professional public and not among the wider public. Specifically that was shown in politically tainted turbulence in that institution in recent times which definitely didn't do any good to image of Croatian film. Besides that, it is important to highlight the opinion of the expert who claims: "Media constantly insisting on showing the commercial success of every Croatian film in cinemas, of course in relation with its cost, creates completely wrong image in the public. Cinemas are only part of distribution chain, Croatians film have much bigger viewership through other distribution forms, primarily through (national) TV channels."

Figure 2. Reputation of Croatian feature film in last years

Source: Authors

According to general opinion of experts in regards to reasons for (not)watching Croatian feature film in cinema: in last approx. 5 years, before 2000, and before 1990s, quality and scenario and stories, as well as themes and characters, make main reasons of (not)watching Croatian feature film which are always present and hold *"in all periods and in all societies"*, as one expert put it. Besides that, the most common reasons in the opinion of experts are bad reputation of Croatian films, then the fact that Croatian cinematography mostly comes down to *art* movies and introversion and uncommunicativeness, that is the fact that Croatian movies are not made for wide audience. Some experts stated quality as the reason, and one expert said it is the bad quality of the films that was the main reason for not watching Croatian films before 2000s, and also one of the main reasons before 1990s. As one of the reasons of poor viewership of Croatian films during the 1990s some experts stated the fact that a lot of movies made in that time were propaganda movies with themes of war, that is films *"tainted by excessive national enthusiasm"*, as one expert put it, which audience soon found boring. Some agree, on the other hand, that before 1990s Croatian film in general didn't enjoy popularity and wasn't much watched. So, it can be said the crisis began at the start of 1990s with the beginning of Croatia's War of Independence (Homeland War) which had effect on national cinematography which started producing war-themed films which soon wore out, that is they never even began to live, because of which Croatian film even today suffers bad reputation. It is interesting that, besides that, one expert states bad and unsubstantial marketing as main culprit for low viewership during the whole that period, and unattractive films as reason for low viewership during the 90s (*"war movies with similar themes and motives and art films, and lack of diverse genres, more cheerful themes and similar"*), while competition of media platforms remain today's problem. Some of the less mentioned reasons which experts stated are: engagement of distributors, (wrong) decision of presentation and place of screening the film(s), high price of cinema tickets and the change in structure of public that goes to multiplex cinemas, the emergence of mentioned multiplex cinemas,

new media as well as new options/ways of watching films, then global crisis of viewership, strong competition, changed media perception of film and bigger impact of television, the loss of cinema going-out as important event and the loss of social status of film, and in general changes in tastes and habits of the public, under which it is meant viewers' habits.

The main influencing factors on the viewership of Croatian film for majority of experts are firstly the story itself and/or scenario and related directing and actors, that is acting. To be precise eight experts have stated some or all of these factors as main factors. Then follows promotion, distribution, genre (which is connected to the story), cinema owners, changes in viewers' habits/behaviors and expended offer as (next) most important factors. Some experts have remarked that story, actors, promotion, media and critic, HAVC, distributors, and cinema owners are all equally important and that everything needs to be reorganized. One expert stated that it is number of factors and depending on circumstances every one of them can be crucial, that is more crucial than the others. Interestingly, only one expert recognizes the importance of HAVC, and only in case when un-populistic film is in question, while on the other hand other expert completely disregards any role of HAVC on viewership. Also, indicated is the problematic of bad positioning of Croatian film and need to distinguish and divide films into those which are intended for narrower public and those which are intended to wider public, and mentioned is also the problem of lack of true acting stars.

One expert has stated festival rewards as influencing factor on image of Croatian film among the members of film industry, meaning professional foreign and national juries, film distributors and so on, while stating the quality as crucial factor among the public, meaning average viewers. Another expert has also stated quality as main influencing factor on the image of Croatian film, while others stated as factors bad scenarios, films themselves, unauthenticity and unoriginality which altogether falls under quality of the film, so therefore it can be said that quality has the most important role in the image of Croatian film. Some

experts listed media coverage related to the film and genre specification as main factors. Besides that, one expert has indicated viewership as main influencing factor on the image of Croatian film, and backed that opinion with assumption that the more viewers there is in cinemas, the better the image of Croatian film is created. There is also an opinion that prejudices that follow Croatian film are crucial, prejudices that everything Croatian is worse than foreign, as well as opinion that the general wider media perception is the main culprit, that is main influencing factor on the image of Croatian film. Also, the low presence of Croatian film amongst the cinema audience is stated as influencing on the image as well, more precisely it is remarked that without (larger) presence of Croatian film there can be no image at all. In addition, one expert stated scandals that surround Croatian cinematography as main influencing factors on the image.

The role of critics of Croatian film in last five years and its influence on viewership is minimal or nonexistent according to majority of experts. One expert has remarked that the role is minimal in the sense that this influence is only present among smaller number of people and for specific profile of film titles, and that is because of the profile of audience itself (the multiplex-cinema audience, that is the audience that frequents multiplex cinemas, which is mainly consisted of people younger than 30 years and teenagers) and because of lack of relevant names among critics. Some experts are of opinion however that the role is big and significant, and others think it is only partial. Of those who are of opinion that the role is big and significant one expert has specifically stated that the reasons for that is because in today's world of Internet and fast information everyone can become critic and can determine from the start the fate, success of certain film as the first one who publishes the critic of that film. One expert mentions as reason of partial role of critics the problem of Pula Film Festival which in his/her opinion is taking place in the worst period (summer season) and then it is written about the film the most which in turn has effect only on those who attend or follow the festival (and that is small part of potential audience), and later when film goes in cinema distribution it goes unnoticed. Also, one expert mentions there is influence in case of total and constant critics and that then can persuade the people to go watch Croatian film.

However, that influence of critics (criticism) before year 2000 was greater and that today it diminishes majority of experts thinks, with explanation that critic was then more important, more relevant and more present and that newspapers, that is media had greater credibility while critics enjoyed bigger reputation. Still, some think that influence remained the same, more precisely that it wasn't great and significant then and it isn't great and significant today. Also, there is an opinion that influence of critics (criticism) increases due to technological revolution, changes in viewers' habits and incredible number of titles in the offer on all distributional platforms so people depend more on recommendations and critics (which assumes then greater impact of critics in the future as

well), and that is then stated as more important factor than the expertise of the critics itself.

In regards to familiarity of Croatian public with all the forms, legal and illegal, of public showing of Croatian film, several experts are of an opinion that large number of the public is well familiar with these, and especially the younger public to whom everything is accessible. However, they are opposed by some experts who think that public is not familiar enough with these, with one expert stating that public is not taught to view piracy as criminal act. The opinion of one expert who thinks that piracy is harming the whole industry supports this. Another expert points out that today people go to cinemas for specific reasons, so they can watch certain rare film, and the rest of the films are watched later, when there is already a possibility of watching for free. That cinema is too expensive, that is that cinema tickets are the main problem and main reason why people illegally download and watch films, including watching via YouTube, several experts claim. This has important implications since as one expert put it: *"People are prepared to pay premium price for premium product."* And Croatian film, according to opinions of experts, is not that or at least it is not perceived as such.

Experts have dividing opinions whether the information that is positive in regards to viewership of Croatian film, information that indicates that (how much and in which ways is Croatian film watched), would change the negative perception of Croatian film. Thus, several experts think this information wouldn't change significant or at all its negative perception, while several experts on the other hand think it would, and positively at that. Others claim that for that to happen it would require a lot of time and effort. Moreover, one expert points out that when viewership is the only criteria then this creates image and changes perception, while another expert completely rejects cinema viewership as important factor, parameter.

That price of cinema tickets should be lower in order to increase the viewership of Croatian film think majority of experts, with one expert stating that prices of cinema tickets for all films are too expensive not just for Croatian film; so, in general the prices of cinema tickets should be lowered. According to them, that would not harm the image of Croatian film, since, as one expert put it, image doesn't depend on price. One expert claims that interest in the film still has crucial role, and two experts think that lowering the price of cinema tickets should not be the only measure. With that agrees one other expert who thinks that even if the Croatian film was free that wouldn't help much because price is not the factor. In addition to that, one expert expressed concern that although it is somewhat possible the increase in viewership of Croatian film would be achieved through lower ticket prices, the long run consequence of that could be Croatian film starting to be perceived as of less value and lower quality. Other expert has pointed out, however, that even then the viewers could be more inclined to choose more expensive and attractive foreign film. Some experts think that the price of tickets in multiplexes should remain the same, that is

that they shouldn't be lower because that would harm the Croatian film, but that it would be good to have lower price of tickets for Croatian films in independent cinemas and in organized distribution. Only one expert responded that the situation wouldn't change much either way.

That price is too high, that is that cinema ticket is too expensive for Croatian standard despite being lower in comparison with other European countries is the opinion of great number of experts. Some of them have pointed out that when other expenses for other things that accompany the cinema going-out, like popcorn, drinks, parking, etc., are added up to the price of tickets the whole thing becomes too expensive and almost turns into "elitist" fun, especially when there are illegal ways to watch films for which nobody pays any consequences. It is clear how that has effect on viewership.

Concerning the familiarity of experts with viewership of domestic film in countries of European Union the opinions are divided. Several experts agree that in France domestic film is watched more, that situation related to viewership is much better. Amongst them one expert thinks how in general situation is better than in Croatia, and one that situation is similar. Also, some experts think how majority of countries in European Union have same problem, especially in terms of "competing" with American films.

Marketing in Croatian film and viewership

When familiarity of Croatian producers, distributors and directors with marketing is in question, several experts hold that Croatian producers, distributors and directors are familiar and know marketing, some think they relatively know, and one expert thinks they don't know. Other experts didn't give specific answers to that question. Concerning who knows and applies marketing the most and who the least, several experts claimed that producers and distributors in general know and apply marketing the most, as it is in the nature of their jobs, but also that it can be seen that some of them know marketing excellent, some well and some not at all. Also stated is the opinion that producers and distributors always think they know the best what is marketing, but that they should let professionals in these fields handle marketing and marketing activities. Some experts, on the other hand, stated that directors are those who know marketing the least, and one expert has pointed out that *very small number* of directors knows marketing. One expert responded he couldn't say/assess, and five experts didn't give the answer, but only stated that marketing in general is poor, bad or practically nonexistent in Croatian film.

Moreover, majority of experts think that through usage of marketing tools the viewership of Croatian film would surely be improved, with some experts mentioning preconditions for that such as: that the film itself is of quality and of genre attractive to public; if marketing tools would be applied at the stage of imagining and conceptualizing the film and systematically implemented all the way to

the distribution; if they would come in combination with adequate distribution and if it would be implemented by the people who really understand and know marketing. Some experts are of an opinion that it depends on the quality of marketing performance itself and if it is the case of average or above average film in terms of quality – if the latter holds then definitely, otherwise not. On the other hand, two experts think that problem is somewhere else, more precisely in quality of the film itself and that successful product can't be made out of a bad product regardless of marketing abilities and tools. One of the experts goes on to say: *"If the implementation of marketing tools would start already at the stage of creating and conceptualizing the film and systematically implemented all the way to its distribution – surely the viewership of the film would increase."* Other expert is also of an opinion that usage of marketing tools would increase the viewership of Croatian film but adds: *"Through increased viewership in cinemas the image, without a doubt, would be improved as well. Namely, according to profile of Croatian cinematography as author cinematography and the fact that films are dominantly created from internal need of author, and not for market reasons, in most of the cases later marketing implementation and processing that starts when the film is already finished is destined to fail in advance. Result, in the end, depends mostly on creativity, that is improvisational inspiration of distributor houses that try to save what can be saved. Results, as it can be seen, are in most cases very weak."*

That through implementation and usage of marketing tools the perception and acceptance of Croatian film by the public (market approval) would improve the majority of experts think, precisely eight think that it definitely would and two more think that it probably would. Others, looking at their responds in general, claim that it depends on marketing approaches but also the "product" itself, meaning the precondition is good, attractive and quality film.

According to the opinion of majority of experts the commercial or market-oriented films for wider audience should be more clearly defined and separated from "artistic" films that have no commercial purpose, and different marketing, distribution and other approaches should be applied. Some experts mention the role of HAVC in everything, and that HAVC decides on these questions and in which direction will Croatian cinematography go since HAVC (co)finances films. Only one expert has stated opinion that that should be done so the viewers aren't cheated, in a sense that public would know exactly what kind of film it is and so that every film would then reach its intended audience, and that they should be advertised in a way that would bring them closer to their intended audiences – meaning commercial films should be advertised as American *blockbusters* are, and *arthouse* films purposely brought closer to alternative, art-inclined audience. One expert thinks that the simplest solution would be to call for different competitions for authors' films and commercially oriented films, and other expert thinks that content itself and even genre of the film would

set and determine this line. However, some experts think that this division is wrong and even totally amiss since, relatively speaking, commercial films have art potential and art aspirations, and one expert mentions that is more the question of whether populist or creative films will be made and both require specific type of promotion and distribution.

Concerning how to more clearly define and separate commercial or market-oriented films for wide public from “art” films that do not have commercial purpose and how to apply different approaches to marketing, distribution and other, the opinions are following. Some experts deem *art films* should be distributed in independent cinema network along organization of special events so the interest for them would be prolonged, and some think that *art films* should find their own way to their audience through festivals, revues and/or television. One expert, however, is of an opinion that every film is product for itself and should be approached in that way, individually, and that it is then wrong and unnecessary to define boundaries, lines.

Opinion that experts stated the most in regards to who should have the main say on that kind of distribution and/or promotion is distributors and/or cinema owners, then follows the opinion of several experts that it should be HAVC. One expert mentioned that HAVC should have main say only at the beginning of decision-making, and later producer, distributor and cinema owners should also participate. That all “actors” and participants should together decide several experts think, and two experts hold that producers and distributors should primarily have the main say. Other opinions are that the main say should have: producer and director together, marketing experts, producer and HAVC but with consultation with distributor. It should be mentioned that one expert thinks there should be a company or people in whose profession it would be to work on positioning and marketing, but in the absence of that all the “actors” should together decide on that.

Also, majority of experts think that through the “division” definitely better picture of Croatian cinematography would be achieved especially in terms of viewership, with one expert stating, however, that only holds for commercial films and not in the case of art films. Several experts said they believed it would, that is it probably would, while two experts stated precondition is firstly that films are better, interesting and of quality and without that nothing will help, and also stated is the opinion that in general there won't be greater viewership and better perception of Croatian film without commercial *hit* films.

Moreover, almost all the experts think that Croatian films with market potential can compete with American films, that is several experts have specifically said in general they can while some said particular films, films with quality, interesting scenario and story which communicates with the audience, has market potential, good acting, directing, production and so on. Of those who said Croatian film with market potential can compete with American films several expressly agreed marketing tools can help a lot with that. However, one expert thinks they can compete

with great difficulty but that usage and implementation of marketing and marketing tools can at least partially improve the position of Croatian film. Some experts claim they can compete, and in great amount, and even be better, that is fare better. As evidence of that experts claim the successful cases in other European countries and their positive experience. One expert stated and proposed that whole country should get behind domestic film so that position of Croatian film improves.

In regards to whether and how much artistic (*art*) films have market potential, great number of experts is of an opinion they don't really, that is they think the market potential is very weak, small and limited, and several experts have responded expressly they don't. Regarding festivals and awards and their influence on market potential, lot of experts agreed they do definitely help, while some stated they don't help or that they help minimally.

Great number of experts thinks presence (promotion) and viewership are interrelated and that smaller presence has effect, in larger or smaller scale, on smaller viewership of Croatian film. However, several of them state that although Croatian film has presence, still this doesn't have effect on viewership, rather it depends of the quality of the film, reputation of the film, the number of commercial films and good stories.

Relating to budget for promotion, opinions of experts are divided. Several think that Croatian film doesn't have big enough budget for promotion, while others think, on the other hand, how it has. One of the later points out that is the case only when Croatian radiotelevision (Hrvatska radiotelevizija – HRT) is co-producer, and another that it is barely enough and that it is difficult to make good promotion of it. One expert responded neither yes nor no, and one that it depends on expectations related to the particular film and that if film has potential producer and distributor will anyhow secure the funds necessary for its promotion. Two experts hold that problem greatly lies in promotion being included under production budget and that promotion should be financed afterwards as is the case in many European countries.

Similar situation is in the case of the effect of smaller/insufficient budget of promotion of Croatian film on its lesser presence and visibility in the media. Here as well the opinions of experts are divided. Several experts think Croatian film isn't less present and visible due to smaller, insufficient budget. They think budget is sufficient and that Croatian film has sufficient promotion in the media, with one expert pointing out there is a lot more layers here that should be improved when talking about state of Croatian film, and one stating how media coverage or its lack doesn't necessarily depend on the budget. On the other hand, some experts claim how smaller budget of promotion directly effects the presence and visibility of Croatian film in the media. One expert stated that in cases when HRT is co-producer film has even more significant and greater promotion than American films. In addition, one expert has mentioned that it depends on producers and distributors, and one other remarked how Croatian

film is definitely less visible compared to American and, in general, European film.

Majority of experts think that state of promotion of Croatian film in last approx. 5 years is solid or good, or better than it was before; one of them points out that holds for promotion in abroad. According to one expert it is clear producers pay more attention to promotion and invest more in it than before. In addition, several experts stated that state of promotion varies too much and it depends on producers and distributors, meaning there are good and bad examples. Only one expert has expressly remarked that the state of promotion is bad.

That promotion has effect on viewership of certain film in general it can be concluded upon the opinions of experts in regards to relatedness of relatively good viewership of, relatively speaking, "bad" American films. Namely, experts identify promotion and visibility in combination with the education of the public as main reasons of relatively good viewership of mentioned "bad" American films. Besides that, reasons also mentioned were: education of the public, education of the public in combination with themes of the films, and customs and habits of the public. Cinema or, more precisely, multiplex audience is younger and mostly goes to cinema because of hanging out and because of fun and the last thing they want is to watch a film which will 'give them to think'. One expert stated that viewership is not at all in significant correlation with the quality of the film but with communication potential certain film has, whether that be story, style of storytelling, actors, special effects or other. Therefore, it can be said that the main factors of good viewership of "bad" American films are their promotion and visibility and the education of public.

The great majority of experts agree that Internet has the most significant role in promotion of films and thus state that as the most effective channel for promotional activities, especially when taken into consideration is the ever-growing popularity of various Internet portals and social networks. However, they also recognize the importance of other media, mostly press and television and mobile phone. As evidence to that speaks the fact that almost all of experts recognized Internet as very important channel that should definitely be used for promotion. Two experts responded they do not know and they are not competent to say, and some pointed out that it depends on the audience, public for whom the certain film is intended since not everybody use and follow same media. Several experts indicated cinema *trailers* and *teasers* while one expert stressed importance of women magazines (and portals) in the case of female population. Two experts stated word of mouth as the most effective channel, only one expert stated that all channels are important and significant, while another expert stated exclusively TV as the most effective channel (since everybody is watching TV).

Regarding the usage of new "telecommunication and information" technologies in promotion of a film and achieving the greater visibility and possible viewership of Croatian film, experts in majority agree that

telecommunication and information technologies are if not indispensable and crucial then either very important or very significant and useful. Two experts are of an opinion they are good method of promoting a film, with one expert pointing out they can have negative effects since negative reactions and *word-of-mouth* spread quickly via Internet and social networks. However, some experts stated their usefulness depends again on type of public the film is intended for, while other, otherwise of an opinion they can help a lot and are significant, still points out that no kind of promotion via social networks is going to help a film that is not contemporary. One expert remarked how film trailer is crucial, and that all other methods are only auxiliary. Also expressed is the doubt concerning efficiency of sending *sms* and *mms* messages and concern for being careful when sending e-mails so that e-mails reach exclusively people who want them, meaning those subscribed on *newsletters*, because otherwise they will have completely reverse effect from the desired one.

Several experts think that sponsorships mostly have no influence on potential and actual viewers of Croatian film, while some, however, think they have influence and that their influence contributes. That media sponsorship is positive and can help the visibility of film, and that *product placement* can have positive impact, are also some of the opinions of experts and one expert thinks only global sponsor can have influence on the viewers. According to the opinions of experts, general public notices sponsorships the least. Except that, interesting is the opinion of one of the experts that *branding* as such is not recognized at all from the side of the Croatian film (Croatian film industry).

On the other hand, some experts believe that viewers rarely notice product placement in Croatian film or they notice it only partially and thus the product placement doesn't have any influence on their experience of the film. Some experts have nothing against the product placement in Croatian film, but they point out it need to be utilized in a good way. Its financial, that is commercial value which is apparent in improvement of financial situation of the project, meaning film, was recognized by smaller number of experts. Two experts stated it doesn't exist, and the same number of experts stated it is unproductive in Croatian film, while one expert stated it is insignificant. Other opinions are: it has sense, it can positively influence when it is good, that it has huge but unused potential, it is positive but depending on who is using it.

Also related to marketing and promotion of Croatian film, and thus its viewership, it needs to be mentioned there are positive and negative effects of its showing (screening) on festivals, concretely at Pula Film Festival. *Positive effects* would, according to (some) experts, be: positive PR (public relations), media promotion of films, building the *awareness* of the public to the film, treating the film as cultural fact, lot of people get to see the film. *Negative effects* on the other hand would be: loss of good timing for screening the film in cinemas and the burnout of PR so it is less written and said about the film later – it loses its first noticeability, especially among the average public which

doesn't even in the time of festival follow events and stories related to the festival and program of films being showed at the festival, and even if it does, usually by the end of the summer they forget all about it. Except that, in opinion of some experts the bad grades of the public and bad reviews (critics) can result in negative word-of-mouth and films being remembered in negative context and that harms them more than it helps them. On the other hand, in opinion of some other experts *premiere* of Croatian film on Pula Film Festival has no effects whatsoever, neither negative nor positive.

Just the same, there are positive and negative effects of knowing Croatian film will be showed on television (usually on HRT) about a year from its cinema premiere. Thus the opinions of experts can be reduced to that the *positive effects* are the awareness of the film being the part of national culture, opportunity greater number of people, that is wider public can see the film, with that that for two experts there are no opposite, negative effects. However, the rest stated negative effect is that affecting negatively on the cinema admissions, since people will have fewer incentives to go to cinema to watch the film as they know that the film will be shown on television, so they will rather wait. One expert only stated it is positive, and another it doesn't have negative effects, but he didn't mention positive effects. The rest of the experts said that it doesn't have any effect, neither positive nor negative, since as one expert put it: *"today in the age when it is known in advance when the American films will be shown in Croatian cinemas, that still doesn't harm their cinema results (box office)."*

In the end, the most experts explicitly or implicitly agreed that distribution via multiplex cinema, where there is fierce competition, harms the visibility and viewership of average Croatian film. In short, if the film is shown among the great number of excellently promoted high-cost, big-budget American films it is very probable that the public won't notice it, see it and would completely skip it. Contrary to their beliefs, several experts share the opinion that kind of distribution helps accessibility and viewership of average Croatian film. Some experts stated it depends whether film in question is commercial or art film, concretely distribution through multiplex cinemas can definitely help and ease accessibility and viewership of commercial Croatian film, but not of art film which should be screened at independent cinemas since the public that goes to multiplexes goes with the intention of watching commercial film.

Croatian cinematography

The complete new production of all Croatian feature films in last ten years most of the experts perceive and grade as weak or just sufficient (expressed in grade it would be D). Several experts think complete new production of all Croatian feature films in last ten years is very positive and solid, meaning good, and some experts think it is very bad with several exceptions, that is the feature films are much

worse than all the other kinds of films. However, some opinions are the production is diverse, meaning there are mixed results, but it is better than it was ten years before that.

However, in regards to the overall new Croatian cinematography in the last ten years, the great majority of experts think it is very good or in better position than before. More precisely, six experts have recognized significant improvement in Croatian cinematography compared to period before ten years, while five experts graded the overall new Croatian cinematography as very good and positive. One expert graded it only as good, and one expert graded it as sufficient (D). Except that, only one other expert thinks it is very diverse and interesting which also falls under positive grade as well.

However, most experts think that long feature films lag behind or stagnate compared to other forms in Croatian cinematography, stating they are either worse or that other forms, for example, documentaries and short feature films, adapt faster or they are given more attention. One expert states: *"I think that long feature films are a lot worse compared to other kinds – documentaries, short feature films, animated films... Within that, there is several excellent films, a lot of solid, good films, but the general average isn't satisfactory because there is no continuity, nor something we could call recognizable picture of actual Croatian film. Especially in last several years, when there is a paradox – the more system is organized (HAVC), films are weaker. In all segments except long feature film cinematography from year 2005 to 2015 is better from the one of ten years before that."* Besides that, one expert stated that proportion of relatively quality documentaries has increased, but he (or she) doesn't specify how he (or she) sees the relation of overall cinematography and feature films. The opinion of another expert is that there is a lack of good feature film, but he also doesn't explain exactly how he sees this relation. Some experts, on the other hand, think (long) feature films have advantage over the other forms, except – as one expert states – when it is the case of a festival. One expert merely stated how in all cases situation is similar, how short feature films are produced a bit more, but the range of quality is the same.

Moreover, according to the opinion of great majority of experts, interested public and potential viewers perceive negatively today's overall Croatian cinematography in comparison to the world cinematography, more precisely they perceive it as insignificant, unimportant, inferior and as lagging behind the world cinematography. Some experts think viewers and the interested public are sceptic and don't have trust in Croatian film, which can also be characterized as a negative perception. One expert however thinks that, despite that, viewers still perceive it and regard it as the best one in the region.

Concerning the public's perception of Croatian theatre, literature, painting, music in comparison with the world's equivalents, several experts think it is equally bad as is the perception of Croatian film in the same comparison. Several experts stated however they don't have sufficient

knowledge, how it is hard for them to judge, evaluate, with one giving opinion that Croatian theatre is still perceived better than Croatian film in comparison to the world's equivalents, while painting and especially music lag behind a lot. Also some of the opinions of experts are: perception of these branches of art in public is much better, public perceives them in a good way compared with world's equivalents, perception is similar, but music and theatre is somewhat better perceived. Mentioned is also the problem of a narrow number of people that follow and understand all these branches of art and situation in world and home culture.

Croatian film industry as branch of industry

Majority of experts is of an opinion that Croatian film industry isn't recognized by the public, politicians and members of the profession as the branch of economy, with some experts remarking how it is only recognized by the members of profession and within professional circles. That it is recognized, but rather partially, or that it is insufficiently recognized opinions are of the several experts, while one expert states it is recognized and that is bad since it is perceived as a branch of economy that only costs money.

In addition, six experts didn't know nor didn't want to estimate how many people are employed in the Croatian film industry in a year, and several think around thousand people are employed. The rest of the estimates are: around two to three thousands, several hundreds, a lot.

However, almost all the experts agree that Croatian cinematography contributes to the country's budget, but could not estimate how much. Thus only one of them remarked how it contributes greatly, one said only films that are *hits* contribute, and one expert stated that it contributes more and more. Some experts stated it contributes minimally or insignificantly, and one stated it doesn't contribute at all, but rather that it "*wastes budget money*".

How much from the total budget of one film is "given back" via tax and surtax to the national budget experts could hardly tell. Of those that tried to estimate two said between 25 and 30 percent, one around 20 percent, one around 30 percent, one stated one third, one around 40 percent, and one at least 50 percent. Some stated they don't know but they think it depends on the budget of the film.

Finally, great number of experts agrees that foreign films that are shot in Croatia contribute to the tourism and image of Croatia, and mostly a great deal. However, at the same time they say how in comparison to them contribution of Croatian films is very small or practically non-existent considering that Croatian films, as one expert pointed out, are watched only by the festival public. On the other hand, several experts said that both contribute to the tourism and image of Croatia. One expert wasn't quite sure but stated how allegedly they contribute. However,

one expert pointed out how again insufficient number of foreign films is being shot in Croatia so it can be said the contribution is questionable.

Croatian film today – today's position, problems, suggestions

Film public in Croatia is, according to responses of the experts, mostly divided and diverse, and can be divided into much more common *mainstream/multiplex* public that usually watches commercial films and smaller art-inclined public that watches *art* films and consists of cinephiles and culture-enthusiasts. As one expert states: "*Film public in Croatia is extremely divided between multiplex public and festival public. Lines are very clear: festival public rarely goes to multiplex cinemas and vice versa. There aren't many consumers of art or festival films –usually always the same type of public goes to festivals. Exceptions are several festivals that visit people who otherwise don't go to all the festivals. The great gap between these two types of public is harmful to the reception of film art in whole as there is less and less true cinephiles that watch all the films, without prejudices. Public needs to be educated, but by who when the educators are the first ones stuck in ghettoization and educate children in equal measure to art as mass media to Hollywood.*" Moreover, film public in Croatia is mostly young and consists of teenagers and people younger than 30 that have "populistic taste", as one expert put it. According to the opinion of experts Croatian film public is generally very small, or not large enough, average, very susceptible to the influence of promotion, "reeducated" on new rules and thus has changed tastes and habits.

Concerning when the education of the public should start, majority of experts, actually everyone who stated their opinion in regards to that, agrees that public should be taught from early age, from the beginning of elementary school and even before that. Concerning the methods in which they should be educated, or taught film culture, several experts stated organization of mass visits or class visits to the cinema to watch *art* films, in equal measure of Croatian and European cinematography. Other suggestions are: film workshops should be organized, and, in general, film culture should be included in the education, with it being part of teaching curriculums. According to one expert, media should also have role here. At the end, related to the influence of Hollywood films on education of Croatian public, some experts mostly agree the influence is strong, significant and mostly bad.

On main difficulties and biggest problems of Croatian feature film opinions of the experts are divided. Some thus think the main problem is in directing and scenario, quality stories and ideas or their lack, and two stated the product itself is the biggest problem, that it is not attractive to the public and doesn't satisfy its needs. One expert namely stated discrepancy between written scenarios and budget potential as main difficulty, and negative attitude towards Croatian film as main problem. Other opinions are the

following: main problem is collaboration with HTV; bad treatment of the public, meaning ignoring the public; bad perception of the public and not doing anything in regards to that is the main culprit for the state of Croatian film; weak viewership and lack of source of financing.

In order for Croatian film to achieve commercial success, according to the general opinion of experts, there needs to be more elements of comedy and contents intended for children and above else quality and attractive stories and scenarios. Concretely, the opinion of great number of experts is that it needs to have comic, humorous contents, that is elements of comedy or be of a genre of comedy, and almost all of the experts think how Croatian film needs more contents intended for children as well. Some experts stated children for films should be produced more, based on either children literature or some other contents familiar to children. Some of them even mentioned the story of the film itself should be interesting, clear, good, some that the scenario should be excellent, and some that the films themselves should be attractive. When all of that is taken into account it can be said that great number of experts are of an opinion the story itself should be of a certain quality and attractive to the public. Added here can be also the opinion of one expert that contents and elements of the film should adhere to the taste of the public. Some experts stated that directing and director are also important. Thus two experts think that each element has to be of a quality, has to have quality, meaning that there needs to be quality in the product and production itself, in distribution, marketing and promotion as part of the marketing. One expert claims there lacks more emotions and genre diversity, and points out: *"There is a chronic lack of comic texts, children films, crime films, horrors."*

Finally, out of all the experts that participated in the research, four gave additional suggestions and comments on what else they consider significant and which wasn't mentioned in the interview. One stated it is necessary to improve perception and raise the consciousness about film industry as a branch of economy and about production as profession. Second expert suggested replacement of front-rank men in HAVC, third expert that the intrusion of crime in Croatian film should be investigated further, and fourth expert that the call (application) for scenarios/projects should be organized in interesting way, maybe postulated by genre, and application of scenarios stimulated, encouraged.

5. CONCLUSIONS

According to the opinions of the experts state of Croatian cinematography and Croatian film isn't the best – Croatian film is not watched, not followed, is not appreciated, doesn't achieve desired results, is marginalized and the public in general doesn't have positive opinion about it. This conclusion can be made based on the opinions of the experts.

Concerning the viewership and reputation of Croatian film, experts mostly agree how majority of Croatian films wouldn't be watched today in equal measure as they were in the past, due to changed tastes of the public, habits of watching films, development of other forms of distributions, new production standards and expectations of the public. However, quality Croatian films, films that are classics in the Croatian cinematography would still be watched due to nostalgia, their quality, modernity and cult status. Also, great majority of experts consider reputation of Croatian feature film as bad as it was in the 90s, without improving much, however they consider there are some signs it is improving. Other reasons why Croatian film is not watched, besides bad reputation, are: excess of art films and war-themed films which either are not for the wider audience or the public has grown tired of them, lack of genre diversity and lack of quality films which are interesting with their scenarios, stories, characters and themes. The story and/or scenario, directing and actors/acting, and marketing are precisely the main factors of viewership of Croatian film in cinema, and quality itself and media coverage and genre identity main influential factors on its general image. Critics (criticism), according to the general opinion of experts, doesn't have any or it has little effect on cinema viewership (box office) of Croatian films, and its role was bigger and more significant before. Concluded is also that insufficient total production budgets greatly influence, negatively, more closed and narrower frame of themes and contents of the films in terms of production.

Producers and distributors in general know marketing in Croatian film the best and apply it, while marketing tools would definitely contribute to bigger viewership as well as better perception and approval of Croatian film by the public. However, experts should handle marketing and marketing tools during whole process of producing and distributing the film while the film itself should be of a quality. In addition, according to the opinions of the experts, artistic and commercial films should be more clearly distinguished and separated and different methods and approaches to marketing, distribution, financing, budgeting and all else should be applied for them. At the same time, distributors should have the main word in decision about this type of distribution and/or promotion, then followed by HAVC and producers. Moreover, marketing tools can help Croatian films with market potential to compete with American films.

Related to promotion of Croatian film, the problem is that the promotion still falls under production budget, and is not separated and financed apart, independently. Experts partially agree that smaller budget has an influence on or results in smaller visibility and presence of Croatian film in media, and thus its viewership, while the state of promotion of Croatian film in the last five years they consider as good, solid or even better than before. Except that, as the most efficient channel of promotion stated is Internet, then press and television, and the best effect is achieved when all three channels are combined. In the end, telecommunication and information technologies

in general are indeed very significant and can help in promotion of Croatian film and achieving its greater visibility and viewership, but to which public the film “speaks”, that is for which public it is intended, should also be taken into account.

Recent Croatian cinematography (in the last ten years) experts generally characterize as very good or in better state (position) than before, while total recent Croatian production of all Croatian long feature films they grade as bad or sufficient, of varying results. But what majority of experts thinks is that long feature films stagnate or lag behind the other forms, while documentaries and short feature film are improving. Moreover, interested public and potential viewers perceive negatively today’s overall Croatian cinematography in comparison with world cinematography, and, in addition, they are very suspicious and untrusting towards Croatian film. Similar situation is with other branches of art of *domestic*, national “production” – they are negatively perceived, that is inferior in comparison with world equivalents.

Croatian film industry is not recognized as a branch of economy by the public, members of profession and politicians and it doesn’t contribute significantly to the Croatian national budget, according to the opinions of the experts. However, experts mostly agree that Croatian films and foreign films shot in Croatia don’t contribute to Croatian tourism and image of Croatia.

Finally, related to the state of Croatian film today, significant problem is, according to the opinion of majority of expert, too expensive cinema ticket, that more significant when considered is the possibility of watching films illegally. Except that, the challenge is also *mainstream* Croatian film public raised on Hollywood and inclined towards American commercial films which is in majority, and which needs to be educated from early ages about film culture. However, much bigger, the biggest can be said, challenges of Croatian film are: directing and scenarios, lack of quality stories and ideas, the product itself, negative attitude and perception of the public, ignoring the public and lack of genre diversity, namely lack of comedies and children (kids) films.

From all these summarized opinions of experts, following problems of Croatian film and Croatian cinematography can be identified:

- Croatian film still suffers from its bad reputation gained in the 1990s when films that were made were mostly films with war themes which don’t look convincing and which the public grew tired of
- Structure of cinema public changed as well as the general context of watching films in cinemas in comparison to decades before
- Croatian cinematography is, in line with the small budgets, still focused mostly on more closed, artistic projects intended for narrower group of viewers, narrower segment, and as such does not follow the wishes and needs of wider public

- Croatian film is due to these reasons very genre-limited and unattractive to the wider public with its story, plot, scenario, characters and themes
- Marketing is not used enough and as well as it should be used in Croatian film, which is best seen in the need for distinguishing and separating the commercial and artistic films more clearly
- Marketing tools should be applied already from the stage of thinking about, imagining and conceptualizing the film
- Promotion (as element of marketing mix) is not adequately nor enough used which affects its visibility and viewership, and there is definitely room here for improvement, especially in terms of increasing the budget for promotion which should be separated from the production budget
- The public generally negatively perceives overall Croatian cinematography in comparison with the world cinematography and is untrusting towards Croatian film
- Croatian film industry is not recognized by the public, members of profession and politicians as branch of economy and does not have a support, so in this area there is huge room for improvement
- Cultural, economic and promotional effects (nationally) of cinematography remain disregarded, overshadowed by media coverage of viewership results
- High cinema ticket prices, untimely promotion and distribution of Croatian film, lack of content tailored to the (tastes, needs and wishes of the) public as well as the Croatian film public itself, which is mostly raised on Hollywood films and has low film culture, are very significant problems of Croatian film

Moreover, it is clear from the responses of the experts that all of the hypotheses are confirmed.

H1 (Main hypothesis): Inadequate marketing approach in production and decision of scenario/project results in comparatively lower production quality, and thus in effect in lower acceptance of Croatian film by the public (market approval) in comparison with foreign films (especially of American production.)

Auxiliary hypothesis 1: From the point of the producers (business subjects) and authors in film industry, the opinions that dominate are those that due to insufficient budgets the increasingly less-demanding scenarios/projects are developed and as a resort the artistic (art) films without commercial potential are made.

Auxiliary hypothesis 2: Due to small earnings from the distribution and due to insufficient budgets for film promotion and lack of insight into habits of Croatian viewers, the poorer results are achieved in viewership of Croatian feature films.

Auxiliary hypothesis 3: Consumers (wider public) perceive

overall national cinematography as not of sufficient quality in terms of genres and themes, while particular Croatian films (film titles) they value more. Consumers are also not familiar enough with all the forms of using (screening, airing...) the audiovisual works.

Auxiliary hypothesis 4: Croatian cinematography and audiovisual industry (film industry) are not recognized as a branch of economy in which a lot of people is employed, although it is clear that film can promote country as touristic destination and contributes to the image of the country.

Auxiliary hypothesis 5: Overall audiovisual industry, especially cinema infrastructure negatively effects the visibility and accessibility of national (domestic) film to the cinema public.

In conclusion, from all of the stated the position of Croatian film today can be discerned. Namely, how much effort and work is needed and what measures should be taken in order for Croatian film to start improving in terms of overall image and reputation as well as in terms of viewership and achieved earnings, meaning in terms of financial and other results. These qualitative results however are primarily of investigative character and further research should be made in order to gain better insight into the situation.

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