

## **SUSTAINABLE BUSINESS DEVELOPMENT 1367**

<b>SUSTAINABLE DEVELOPMENT AS AN ALTERNATIVE SOCIETY OF THE FUTURE</b>	<b>1368</b>
Žnidarič Davorin	
<b>SUSTAINABLE TECHNOLOGY AND BUSINESS INNOVATION PRINCIPLES – A COMPREHENSIVE APPROACH</b>	<b>1374</b>
Levi Jakšić Maja, Rakičević Jovana, Jovanović Milica	
<b>CORPORATE SOCIAL RESPONSIBILITY: PHILANTHROPY, OBLIGATION OR UTILITARIANISM?</b>	<b>1382</b>
Stojanović – Aleksić Vesna, Bošković Aleksandra	
<b>THE IMPORTANCE OF ETHICS OF THE BUSINESS ORGANIZATIONS FOR SUSTAINABLE BUSINESS DEVELOPMENT</b>	<b>1389</b>
Erić Ivana	
<b>CONSISTENCY OF THE EUROPEAN COMMISSION'S ASSESSMENT OF PROPOSED MERGERS IN AIRLINE SECTOR</b>	<b>1396</b>
Babić Danica, Pavlović Dejan	
<b>THE UPRISE OF THE MIDDLE EAST CARRIERS – EMIRATES' PATH TOWARDS SUCCESS</b>	<b>1405</b>
Kuljanin Jovana, Kalić Milica	

# **SUSTAINABLE BUSINESS DEVELOPMENT**

## SUSTAINABLE DEVELOPMENT AS AN ALTERNATIVE SOCIETY OF THE FUTURE

Davorin Žnidarič  
FOV- Kranj, Slovenia  
e-mail: davorinznidaric@gmail.com

**Abstract:** *A quick glance at the past and recent periods of time with accumulated environmental problems in time and space, certainly can't give us any pleasure, that we have developed in the right direction as a society. Many years of materialistic exploitation of the environment and its natural resources, forces us into a completely different concept of development of the future society, with its practical and negative consequences because of the degradation in space. Rivalry, selfishness, egoism, have to be replaced with cooperation, empathy, harmony and solidarity, in between all segments of time and space. Thus between society and nature, be it living or nonliving or between individuals or society as a whole. Involving the wider society in decision-making and accountability, but the basic prerequisites for a change in attitude towards the environment and nature.*

**Keywords:** *environmental problems, society, natural resources, cooperation, time and space*

### 1. INTRODUCTION

The time we live in, has been marked by a period of neo-liberal policies, which was based on materialistic exploitation of the environment and its natural resources, social and societal changes that led to the social stratification of the broadest masses and establishment of the elites and capital. At a time when the idea of Milton Friedman (author of the liberal concept and the leader of the so-called Chicago school) in the countries of South and Central America and transition countries (especially Eastern Europe), and Slovenia, was developing in all its "power" is marked by the loss of the middle class, inequality, wild transition in terms of appropriation of firms by individuals and elites, as well as the exploitation of natural resources beyond all reasonable limits. With the increase of the number of inhabitants, the development of industry and transport, have increased demands for goods which have resulted in enormous exploitation of natural resources. Consequently causing pressures on the environment and loss of natural habitats and biodiversity by reducing the animal and plant species. If we have lost 0,2 to 0,5 species in a natural way in a period of a million years (Rockstroem & others in Plut, 2010), we have lost 30% of biological wealth of the planet from 1970 to 2008 (WWF & Living Planet Report, 2008), which can not be replaced by any kind of material assets. The consequences of such practices in and on the environment have led to changes that may be in the area combined with a common denominator as:

- changes in provincial land use and vegetation
- changes in the composition of the atmosphere
- changes in the composition of natural communities and biodiversity loss

Among the anthropogenic (manmade) effects on biodiversity by Jones (2004 in Plut 2010) we can include the following key factors:

- deforestation, primarily due to agriculture
- the use of mineral fertilizers and protective agents for the control of agricultural ecosystems
- increasing urban and industrial land use, thereby burdening the environment
- increasing pressures on flora and fauna due to the growth in population and habitat loss
- climate change due to fossil fuel use

Environmental and social degradation, increasing social disparities and pressures on nature, force us to seek alternative routes for the existence of the planet. Many of domestic (Plut, Kirn, Luksic, Vintar - Mally) and

foreign experts (Bookchin) are of the opinion that radical social changes are necessary if we want to change, or at least maintain the state in which we currently live in and future generations will live in and at the same time enable more or less a decent life. Currently the only option is given by sustainable development, based on the balance of society, the environment-nature and economy-industry. It is a way, which should replace the neo liberal, materialistic concept, because that in the long run leads to shortage (some parts of the world already) and conflict among civilizations, such as the nature.

## **2. SUSTAINABLE DEVELOPMENT - BASIC CONCEPTS**

The concept of sustainable development today can be traced on different levels and different topics. Munro (1995) suggests that it is reasonable to separate sustainability or sustainability as a concept and a key assessment criterion for development and sustainable development as an achievable goal. And states (Munro, 1995), that sustainable development is "a set of activities that would permanently improve the situation for humanity" or "improving the quality of human life within the supply capacity of ecosystems." Thus conceived definition, (Plut in Plan B, 2007) excludes any "sustained economic growth and sooner or later exceeds the universal ecosystem, biophysical capabilities and limitations." The concept of sustainability (Plut, 2004) is seen as a three-dimensional concept, which integrates environmental, social and economic note, but it is necessary to add another two fields, namely a democratic political decision-making process and society's value system. Mansfield (2009) states that the concept of sustainability must include not only technical, but also ethical and political field power centers, which have a strong influence on the creation and on the other hand, solving environmental problems (Mansfield in Plut, 2004). Plut (2014), sustainable development is seen as the environmental, economic and social responsibility, based on a comprehensive, multi-faceted inter-generational responsibility, which is based on the well-being of humanity in the context of local and global capabilities. Most cited but rather vague, is the definition given by the World Commission for the Environment and Development, or the so-called Brundtland Commission, which by one of the definitions, defines sustainable development as; "development that meets the needs of the present without compromising the capacity of future generations to meet their needs "According to WCED (2015) Sustainable development is a delicate balance between the human need for improved lifestyle and a feeling of well-being on one hand, and preserving natural resources and ecosystems on which we and future generations depend. Sustainable growth and development, therefore, are based not only on economic growth but are designed to lead to social and environmental benefit, based on stability, therefore, in the context of environmental, social and economic constraints. That modern civilization has reached the point where we have already reached the limits of the biosphere, and in some cases we have also already exceeded, which has to be dealt with and the need to consciously abandon the paradigm of sustainable economic growth and the associated burden on the planet, is also pointed out by Kirn (2012 ). Kos (2016) is of the opinion that economic growth has to be in balance with social and environmental performance. Plut (2004) in the article Planet and Slovenia faces the challenges of globalization and sustainable development and states, that "the economy is environmentally acceptable only if it satisfies the principles, the principles of environmental sustainability (sustainability), based on the ecology."

Environmental and social interpenetration instead of discernment of nature and human activity is also pointed out by Mansfield (2009), who discusses the current development model of modern civilization and the proposed adjustment of the economic sub-system capabilities of a wider planetary ecosystem. Sustainable development, such as integration, interdependence, coexistence of three separate fields of the economy, environment and society are determined by Bell & Morse (2003). According to Omladič (2011), a sustainable model can be defined as the pursuit of the four core objectives of mankind, enabling the satisfying of basic human needs and well-being of humans and all other creatures, achieve a more equal and more comparable level of life of all people within the (local, regional) and outside the regional Community. In the development we must consider biodiversity in terms of maintaining it and minimizing pressures on the environment. The last goal, Omladič (2011) states is that development should not undermine the ability of future generations and to simultaneously provide a similar or better standard of living than it is now. Importance of the sustainability, individual organizations such as the Sustainable Seattle, define as "long-term, cultural, economic and environmental health and vitality", with an emphasis on long-term, "along with the integration of social, financial and environmental prosperity " or "improving the quality of

life, taking into account the capacity of the planet" (World Wide Fund 2016). According to Pearce, Makandi & Barbier (1989) Sustainable development involves the creation of a social and economic system that with growth in real income, will help improve the standard of education, quality health care, thereby improving the quality of life. That the definitions of the concept of sustainable development are almost as many as individuals and professions from which they arise, and thus varying in definitions is pointed out by Seljak (2000).

## **2.1 Models of sustainable developments**

For the optimal choice of a sustainable development, it is necessary to take into account several factors, which include, the geographical characteristics of individual areas, such as location, natural and human potential, which includes investment in society and the individual, the social situation and the development potentials of the area, environmental - ecological conditions or state of the environment in time and space. Among the most important (factors), we can include the degree of awareness of companies and individuals through participation and taking responsibility for the situation and their relationship in the area.

Lukšič (2005) mentions two approaches to the process of achieving the goals of sustainable development:

- **top-down approach:** in the implementation of the principles of sustainable development, the state plays a major role; (which has been in the current practice proved to be an extremely flawed option, at least in setting policies and their implementation in practice).
- **bottom-up approach:** there is a decentralization of power at a lower level. Local authorities have an important role in the management of local ecosystems, land use planning, are responsible for the disposal of waste, arranging local transportation, etc. (Their effectiveness and adaptability to existing problems depends on the orientation of a local policy, but in most cases do not follow the social requirements and are often better placed to defend the capital - such as Zasavje). In this case, most of the problems lie on the shoulders of local communities, not however on the shoulders of environmental burdeners, but the price is paid by all, irrespective of the fact that inhabitants and the civil society on important environmental social issues generally have no effect, or the possibility of decision-making. We believe that it is necessary that both concepts are adjusted to the reality in time and space, and connect them with each other (national and local), so we can ensure coordinated operation and their accordance with the norms and concepts of sustainable development, and in advance, depending on the situation in the area identify certain goals and then on the basis of the given analysis find the optimal options for balancing the developments and solutions in practice.

### **2.1.1 Designs available to us (by Baker, Lukšič & Bahr) can be divided into four phases/periods:**

- **Ideal (ecocentric) model - strong sustainability,**

Is the model, which as a desired stage of development of Slovenia and the regions belongs to the years between 2030 to 2050. The time of the near future and the continuation of the previous phases of development (a very strong sustainability) and related activities. This type of development is both a sequel and upgrade of all models of developmental stages and represents the final stage, which is completely different, with a not-materialistic concept of development of society and thought. Development rests on the foundations of a priority as environmental well-being, a moderate material prosperity for all, within the limits of the environment, it provides social security, and the predominant use of renewable energy sources. At the spatial level, upgrade continues in the direction of bio-regionalism, the dominance of eco-villages and buildings, as well as the actualization of regional and local self-sufficiency.

- **Strong sustainability**

Type of development goes in the direction of balancing economic, social and environmental areas of prosperity based on the principles of environmental ethics. At the same time the model includes market valuation of ecosystem services, which need to be incorporated into the prices of goods and services. Invest profits into new technologies that allow reducing consumption of regional resources to strengthen local and regional economies as well as the reduction of regional disparities. Looking at the policy of realization, this is based on the active participation of the public, as well as the integration of environmental considerations and environmental technologies in sectoral policies through sustainable education and training at all levels.

- **Weak sustainability**

Proponents of this model are of the opinion that economic growth and environmental protection are not mutually exclusive and, therefore, are not completely at odds. They defend the principle that future generations should not reduce the total capital, but the decrease of the natural can be compensated by increasing the created. They advocate for the global market, at the expense of modest initiatives to the local economy. Advanced concept (weak sustainability) has been committed to solving the pollution at the source. Overall, the strategic development documents of Slovenia among this model (weak sustainability), which integrates economic growth with environmental concerns, does not seek to reduce the consumption of natural resources. Therefore, Slovenia is still relying on a policy to improve substantial energy flows with the aim of (quantitative) growth. But from the perspective of a sustainable future society is by no means an acceptable way, especially given the fact that the market only partially takes into account the environmental policy (Lukšič & Bahor, 2006). Weak sustainability (sustainability) after based on the assumption that with a sufficient degree of accumulation of capital and technical developments can compensate for the depletion of natural capital. Implementation of such a policy, or a model (weak sustainability) can be "seen" in the environment as the adoption of urgent environmental measures by polluters, and even then only in case of extreme coercion, as was the case with Zasavja when the maximum polluters (Larač cement and TET) built the desulphurisation plant only after we entered the EU and thus require policy from the outside. As a positive factor for weak sustainability we could only accept a more environmentally adapted but sustained economic growth to eliminate poverty in the world (Plut, 2014).

- **Pollution control**

Is the lowest level of realization of the greening of development, based on the exploitation of natural resources, exponentially, market guided growth, and the thesis that nature has practical value. At the spatial level tends to globalization and the exploitation of the less developed areas of the world that have looser laws in terms of environmental and social standards. Solutions of this approach are in the construction of treatment plants, thus resolving the consequences, not in terms of eliminating the causes. While maintaining or realizing policies that support capital-intensive technology. Each of the above models has its own characteristics, which makes the top-down (ecocentric model - the control of pollution) follow in the direction of greater emphasis on nature and the environment, the exploitation of natural resources, and the different spatial levels and policy realization (Baker, 2006, Lukšič & Bahor, 2006). What model and to what extent, should be selected according to environmental, social and socio - economic characteristics, which are based on the development and the level of the observed region. If the individual models are time defined according to the desired sustainable development and the current situation, the stages follow: the stage of very weak sustainability, and pollution would have long since surpassed, at least with regard to the time period (the period between 1985 to 2004), weak sustainability should have ended in the previous year (2005-2015), the most pronounced stage is still in store for us in the following years. Strong Sustainability (2016-2030) as well as a very strong one (2030 and 2050) from this year until the middle of this millennium. Featured models may only offer support and guidance, so we can in practice choose a way of implementation of individual activities in the three supporting pillars of sustainable development, which without the active involvement of the wider community, and especially their participation will not be able to successfully perform in a way, that will satisfy all three basic segments, society, environment and economy. Especially given the fact, as the sustainable development of society and its engagement in the decision-making gives a special role and importance.

In short term the company is treated in a completely different way than a before generally valid concept, based on more vertical-hierarchical decision-making process, and is inclined to the horizontal, which includes the increasing role of the civil society. In social decision making, is therefore an increase of active roles of individuals and communities, thereby gaining an important role in decision-making on important issues, not only on the environment but also in the political field. This increases participation on the one hand and responsibility on the other hand, of the decision-making system. As stated by Lukšič (2005) active society that are "understood as those members of society who are able and willing to let their actions be guided by the rules of collective-racional and responsible self commitment", thus taking over the work and roles that were previously the exclusive domain of state institutions. The same author states, (Lukšič) that only in this way (Participation of) "individuals related to social connections and associations and movements, and environmentally aware public, thus shaping what is common best."

### 3. THE PILLARS OF SUSTAINABLE DEVELOPMENT

Despite the different definitions of sustainable development, the supporting pillars of the above mentioned developments are combined in the following denominators:

- stabilization of the world population,
- URE and use of OVE,
- reuse - recycling of materials,
- materially moderation installed consumerism,
- reduction of material and energy flows,
- the balance between economics, social affairs and the environment, and
- orientation to development, social, environmental, solidarity and ethics (Plan B, 2010).

If we want to survive on a planet that is spatially and materially limited, it is necessary to radically change some consumer habits. First, on a personal hereinafter even at the social level. Energy consumption, consumption goods, especially a change in thinking and attitude towards the environment must present a hierarchical way of relating to nature and the environment, which was based on the dominance of -the power of the individual- EGO, change the way of the general equality and empathy, or ECO-but among all stakeholders live and inanimate nature.

### 4. CONCLUSION

After Mintz (1992) we will achieve sustainable development when we can introduce participatory democracy, which will not be dominated by the interests acquired. So in the time when intergenerational solidarity and equality irrespective of skin color status dominate, based on respect for diversity, raising global awareness of environmental and social standards, which will be the same for all living beings on the planet. Planet, which according to Elliot (2003) survives only if the economy and technological activities remain sustainable within the carrying capacity of the environment and its natural resources. The society of the future will have to be based on a totally different basis, than the society of the past, we are witnessing today. The values of solidarity, cooperation, coexistence, understanding will have to be predominant in relation to society, the environment and especially nature. Conservation of fauna and flora, healthy and clean environment, not only desire, but a basic right that should not be just an empty word written on a piece of paper.

Sustainable development paradigm of the future of the society, which is based on the balance of social, environmental and economic indicators and areas, does not have an alternative if we are to survive on this planet.

### REFERENCES

- Baker, S. (2006). Sustainable Development, London & New York. GB, USA, Routledge
- Bookchin, M. (1982). Ecology of freedom, Palo Alto , London & New York, Routledge
- Elliot, A. (1994). An Introduction to Sustainable Development, London, Routledge
- Kirn, A. (2012). Družbenoekološki obrat ali propad, Ljubljana, Fakulteta za družbene vede
- Kos, D. (2002). Praktična sociologija za načrtovalce in urejevalce prostora. Ljubljana: Fakulteta za družbene vede, zbirka Teorija in praksa, 168. (ISBN 961-235092-2)
- Lukšič, A. (2005). Modificiranje in odpiranje okoljskih političnih aren; *Časopis za kritiko znanosti letnik* 33, številka 219, Ljubljana, FDV
- Lukšič, A. & Bahr, M. (2006). Trajnostni razvoj v luči Lizbonske strategije in njene revizije. V: Slovenija v evropski luči znanja in razvoja. Ljubljana, Fakulteta za družbene vede
- Mansfield, J. (2009). Sustainable refurbishment: policy direction and support in the UK. Nottingham, Nottingham Trent University
- Mintz, J. (1992). Environmental Laws and Sustainability: An Introduction; Retrieved from; [www.mdpi.com/2071-1050/3/3/531/pdf](http://www.mdpi.com/2071-1050/3/3/531/pdf)
- Munro, D. (1995). Sustainability: Rhetoric or Reality, A sustainable World, Sacramento-Clearmont

- Omladič, L. (2014). Slovenska okoljska politika v luči globalne razvojne dileme, Retrieved from; <http://www.umanotera.org/wp-content/uploads/2014/10/zbornik-plan-b-2.0.pdf>
- Plan B. (2010). Retrieved from: <http://www.umanotera.org/wp-content/uploads/2014/10/zbornik-plan-b-2.0.pdf>
- Pearc, Makandi & Barbier (1989). Green economics. Environmental values 1. Retrieved from: <http://www.environmentandsociety.org/node/5454>
- Plut, D. (2004). Zeleni Planet?; prebivalstvo, energija in okolje v 21. stoletju, Radovljica, Didakta
- Plut, D. (1995). Brez izhoda? Ljubljana, DZS
- Plut, D. (2010). Geografija sonaravnega razvoja, Ljubljana, Znanstvena založba filozofske fakultete
- Seljak, J. (2000). Plan B. Retrieved from: <http://www.umanotera.org/wpcontent/uploads/2014/10/zbornik-plan-b-2.0.pdf>
- WWF. (2008). Living Planetreport, Retrieved from: [http://wwf.panda.org/about\\_our\\_earth/all\\_publications/living\\_planet\\_report/living\\_planet\\_report\\_timeline/lpr\\_2008/](http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/living_planet_report_timeline/lpr_2008/)
- WWF. (2016). For nature 1991, Retrived from: [https://en.wikipedia.org/wiki/World\\_Wide\\_Fund\\_for\\_Nature](https://en.wikipedia.org/wiki/World_Wide_Fund_for_Nature)



## SUSTAINABLE TECHNOLOGY AND BUSINESS INNOVATION PRINCIPLES – A COMPREHENSIVE APPROACH

Maja Levi Jakšić<sup>1</sup>, Jovana Rakićević\*<sup>1</sup>, Milica Jovanović<sup>1</sup>

<sup>1</sup>Faculty of organizational sciences, University of Belgrade

\*Corresponding author, e-mail: jovana.rakicevic@fon.bg.ac.rs

**Abstract:** Society is looking for solutions leading to sustainable development (SD). The paper focuses on sustainable innovation in technology and business as cornerstone for developing sustainable economy and society. In this context, the paper aims to identify the key relationships and develop the key principles of sustainable technology and business innovation by integrating the general SD dimensions, sustainable business goals and technology and business innovation principles. This paper uses a systematic literature and practice review approach to formalize a categorization of technology and business innovations to deliver sustainability. The research results in the form of a comprehensive framework and contributes to the theoretical background for creating more sustainable business and technology solutions in practice.

**Keywords:** Sustainable development (SD), SD principles, sustainable technology, sustainable business model, sustainable innovation, sustainable economy

### 1. INTRODUCTION

Sustainable technology and business development is viewed as the central pillar of sustainable development (SD). Relevance of the subject is based on the necessity for firms to reconcile sustainability aspects, simultaneously fulfilling all the stakeholders' needs while reaching profitability and respecting the diversified demands of social goals fulfillment (Adams, 2014; Epstein & Roy, 2001; Levi Jaksic, 2015). Traditional technology and business innovation models need rethinking (Ricart, 2014; Chesbrough, 2003, 2014; Levi Jaksic, 2006, 2015).

SD is most commonly defined as “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987) and since then it has been developing and countries, organizations, institutions worldwide have committed towards the goals incorporating shared principles, objectives, instruments. In the past decades there is evidence of a rising interest of researchers and practitioners in sustainable technology and business innovations, especially dealing with technology innovation embedded in a business environment that contribute to developing sustainable economies and societies. (Boons & Ludeke-Freund, 2013; Bocken et al., 2014; Raney, 2006). The challenge for SD is in transforming goals, objectives and principles into concrete actions, behaviors and attitudes at all levels of the economy and society.

Radical technological breakthroughs and innovation in the light of social, economic and ecological impacts and goals, call urgently for new business and technology models and solutions. In this paper the key dimensions of sustainable development (SD) are transformed into sustainable business goals, and further extended to technology and business innovation principles related to these goals.

Sustainable business development rests upon sustainable technology and innovation, and managing technological change directly influences sustainable competitiveness of business operations (Popa, 2014; Rainey, 2006; Levi Jaksic, 2012; Porter, 1985; Chesbrough, 2006; Levi Jakšić, 2006, 2007, 2012, 2015; McIntyre et al., 2013) and more specifically “it is indeed at the strategic level that sustainable development can fully uncover its value creation potential for a company” (Sempels & Hoffman, 2013, p. 3). The relevant literature and practice review shows that in some cases, sustainable solutions in industrial practice appear to be ahead of academia in exploring and developing novel business models (Bocken et al., 2014; Chesbrough, 2014; Moore, 2014).

The remainder of the paper is organized in the following manner: Section 2 presents literature review and basic concepts elaborating the main objectives and hypothesis of a comprehensive approach towards sustainable technology and business innovation. Section 3 elaborates on the relations between SD dimensions, sustainable business goals and sustainable technology and business innovation by developing a set of related matrices. Section 4 deals with concluding remarks, indicates limitations as well as elements of future research. At the end the References are presented.

## 2. THEORETICAL BACKGROUND – BASIC CONCEPTS OF TECHNOLOGY AND BUSINESS INNOVATION MODELS

The aim of this paper is: 1. to investigate the relationships between the SD dimensions, sustainable business goals and Sustainable Technology and Business Innovation principles and models, and 2. to develop a comprehensive framework for a systematic approach towards business sustainability leading to more direct firm strategies for capturing the sustainability synergetic effects. The problem is approached through developing a model of related matrices establishing relationships between SD goals focusing sustainable economy routes and dimensions, sustainable business goals and technology and business model innovations. More precisely, the paper deals with the overall strategic perspectives of business, technology and innovation management for sustainable development. The research is based on perspectives of conceptual reflection in literature and is based on methods of analysis and synthesis, of interpretation and relevant comparisons.

Technology and business innovation drive the economy towards achieving the sustainable development goals. The technology we use in performing business operations affects the environment, society and economy, and in this way technology and business enterprises are generators of potential damage and unwanted effects to global environment, while simultaneously, they are the key solutions to these problems by developing sustainable technology for sustainable businesses. Hence, the emphasis is on technology and business innovation, where sustainable technology and business strategy is approached through sustainable business, technology and innovation principles and models (Adams, 2014; Mendelson, 2014; Hall et al., 2010). "If the business model cannot align economic, environmental and social issues, the only credible solution is to change it...the business model should be innovated by integrating sustainability in order to build or keep a competitive advantage in an ever changing economy" (Sempels & Hoffman, 2013). In the Society and Environment Pull Business Model (Levi Jaksic, 2015), the external and internal factors of the firm environment are interrelated in a virtuous cycle model with social and environmental objectives affecting sustainable business strategy, leading to business and technology innovation, further affecting the processes of creating and delivering value in the form of goods and services which are by market reaching customers and are affecting consumption, further influencing the fulfillment of the initial social and environmental objectives.

Review of relevant literature on the definitions of business model, it is evident that the concepts of technology and business innovation are closely linked. A business model is a conceptual tool to help understand how a firm does business and can be used for analysis, comparison and performance assessment, management, communication and innovation (Osterwalder & Pigneur, 2005). Also, a business model is used as a plan which specifies how a new venture can become profitable (Boons & Ludeke-Freund, 2013) and it describes "how companies create and deliver value to their customers and how they get rewarded for doing that" (Mendelson, 2014; Callon et al., 2007).

The relevance of business model innovation in delivering greater social and environmental sustainability is increasingly recognized and all the relevant components of the Business Model are to be included (Bocken et al., 2014). It means changing the ways you do business and shifting the focus from developing individual technology towards creating new systems, with a broader perspective of stakeholders necessitating a value network perspective for innovating and transforming the business model (Bocken et al., 2014). In the relevant literature, business model consists of different blocks: value proposition, value architecture and economic equation (Sempels & Hoffman, 2013), or value proposition, supply chain, customer interface, financial model (Boons & Ludeke-Freund, 2013). In this paper a business model is defined by three elements: value proposition, value creation, and delivery and value capture.

In this paper, technology innovation is approached by adopting the OECD definition (1995): "Technological product and process (TPP) innovations comprise implemented technologically new products and processes and significant technological improvements in products and processes. A TPP innovation has been implemented if it has been introduced on the market (product innovation) or used within a production process (process innovation)". In this definition 'product' comprises not only manufacturing output, but also services (Cetindamar et al., 2009).

An answer to the dilemmas concerning the relations between business model and technology innovation, especially the dilemma of which is more significant "the hen or the egg", could be found in the brief statement by Chesbrough (2014) "Innovate the business model, not just the technology" further explicated as "a better business model often beats a better technology". In this article it is argued that sustainable technology innovation is inseparable from sustainable business, as represented in the Sustainable Technology and Business Innovation Push - Pull Model (Levi Jaksic, 2015).

### 3. RESEARCH FINDINGS

Business models have received attention in literature and industry and it is increasingly suggested that business model innovation is the key to business success (Chesbrough, 2006, Boons & Ludeke-Freund, 2013, Bocken et al., 2014). The main question and concern is how to encourage corporate innovation that significantly changes the way companies operate to ensure greater sustainability. "Sustainable business models with a focus on technological innovation are market devices that overcome internal and external barriers of marketing clean technologies: of significance is the business models ability to create a fit between technology characteristics and (new) commercialization approaches that both can succeed on given markets" (Boons & Ludeke-Freund, 2013).

#### 3.1. Sustainability goals in innovative company practices

Innovative firm performance measures (Epstein, 2001; BRW, 2015; FastCompany, 2015; FastCompany, 2016; FORBES Innovative Companies, 2016), the main indicators used for innovativeness and the results of the analysis identify sustainability goals as the main driving force for innovation.

The results of a detailed analysis of innovative performance of companies from the *FastCompany* list presented in Table 1. The table indicates the rising relevance of sustainable goals embedded in technology and business innovation. The list taken into consideration includes analysis of 100 companies, 50 most innovative companies in 2015, and 50 in 2016. As it is shown in Table 1, 73.20% of companies have at least one component sustainable (technology and/or business model).

**Table 1:** Share of each SB&T model combination on the selected sample

		Business model		
		Existing	New	Sustainable
Technology	Existing	0%	7.22%	<b>17.53%</b>
	New	5.15%	14.43%	<b>17.53%</b>
	Sustainable	<b>13.40%</b>	<b>4.12%</b>	<b>20.62%</b>

These companies are considered further in order to examine which component of sustainability they focus on the most (environmental, economic, or social). Table 2 refers to the analysis of sustainability aspects of technology, examining existing, new or sustainable business model. It is evident that in all these cases, the main focus is on economic and social aspect of sustainable technology, but is important to emphasize that all the three aspects of sustainable technology are present.

**Table 2:** Analysis of presence of sustainability aspects in technology

	Sustainable technology		
	Environment	Economic	Social
Existing business model	38.46%	92.31%	69.23%
New business model	25.00%	100.00%	100.00%
Sustainable business model	45%	80%	85%

Table 3 refers to the analysis of sustainability aspects of the business model, testing three technology cases (existing, new or sustainable). Again, the results indicate that although companies focus mostly on economic and social aspects of the business model, in all the cases ecological aspect is detected.

**Table 3:** Analysis of presence of sustainability aspects in business model

	Sustainable business model		
	Environment	Economic	Social
Existing technology	41.18%	88.24%	88.24%
New technology	35.29%	88.24%	100.00%
Sustainable technology	30%	88.24%	100.00%

### 3.2. The related matrices of SD dimensions, sustainable business goals and sustainable technology and business innovation

The complex goals of sustainable development (SD) are based on a set of social, economic and environmental equations, noted as the Triple Integrated Equation (TIE). Within this framework the principles of sustainable business and technology innovation are developed involving 'a holistic view of the business environment taking into account social, economic and environmental considerations as well as the more conventional concerns of customers, markets, and competition' (Rainey, 2006). The crucial goals of SD are in relevant literature examined as specific "routes" or "principles" leading to sustainable economy and society.

The "route to sustainable economy" (Jackson, 2009) postulates the characteristics of a sustainable economic system. "Hannover" principles were developed for the purpose to articulate the basis for integrating business management with the realities of humanity and nature (Rainey, 2006) comprising the following: insist on the rights of humanity and nature to coexist; recognize interdependence; respect relationships between spirit and matter; accept responsibility for the consequences of design; create safe objects of long term value; eliminate the concept of waste; rely on natural energy flows; understand the limitations of design; seek constant improvements by sharing of knowledge.

Based on relevant literature and practice review we have identified the following dimensions of sustainable economy:

- Circular economy, defined by the rule of transforming 'waste' into a productive resource and transformation from linear to circular flows in the economy, cited as the "new industrial system that replaces 'end/of life' concept by restoration and regeneration by intention and design" (Sempels & Hoffman, 2013). In this manner each product at the end of its life time or each waste is likely to become a resource for a new cycle of production.
- Substituting with renewables, alternatives and natural processes in order to preserve the natural environment and reduce the exploitation of scarce natural resources. It is defined as reducing environmental impacts and increasing business resilience by addressing resource constraints associated with non-renewable resources.
- Minimizing consumption is related to the overall change of attitudes and behaviour of all the actors in the economy and society, based on a new philosophy of economic and social relations. It is also defined as solutions actively seeking to encourage sufficiency based business models reframing the value proposition to better address the broader range of stakeholders (Bocken et al., 2014).
- Establishing S-E benefit/cost relationship, related to maximizing S-E benefits and minimizing S-E costs based on rethinking and reconsideration at a global scale the principles and models that have been developed in the traditional approaches and applied in practice. Field and Field (2006) argue that the social cost components include the external costs. It is a cost that appears for society and the environment caused by the activity of an enterprise. "Social entrepreneurship provides a social value from its business activities which has an impact on society or the environment" (Bagus & Manzilati, 2014). The rethinking of the business models includes efforts to appraise the costs and revenues in a broad social and environmental perspective, and some solutions introduce Costs and Benefits for Society and the Environment in the sustainable business models (Sempels & Hoffmann, 2013).
- Positive and motivating work experiences enhancing human creativity and skills is emphasizing the satisfaction of working population as the driving force of creativity and innovation.
- Collaboration and sharing rather than aggressive competition is a quest for more integration and cooperative solutions in the activities of the agents in the economic system. It means strategic orientation towards Blue Ocean strategy (Sempels & Hoffmann, 2013).
- Factor 4 is defined as a strategy of halving resource use and doubling wealth indicating integration of the triple equation goals (Bardy & Massaro, 2013).

In Table 4 the dimensions of sustainable economy are related to Sustainable Business Goals (SBG) and presented in a matrix relationship model. It is noted that the elements of the matrix do not represent an exhaustive list; it is open for new considerations.

The SBG are listed as follows:

- Maximize material and energy efficiency, based on material productivity resource efficiency and waste reduction. It means doing more with fewer resources and generating less waste, emissions and pollution. It is in line with the traditional cost reduction goals of the manufacturing sector designated as 'lean manufacturing' seeking to minimise waste in production processes;
- Create value from waste is the concept by which waste is eliminated by turning waste streams into useful and valuable input to other production and making better use of underutilized capacity;

- Zero waste & emissions goal sets high business operations quality management standards and procedures;
- Delivery of functionality rather than product ownership is a strategic goal to provide services that satisfy users' needs without having to own physical products (Bocken et al., 2014);
- Stakeholder satisfaction is a goal that identifies the interests of firm's various stakeholders and articulates the specific goals and strategy to satisfying these goals. The company responds to all stakeholders' needs: those of consumers, employees, suppliers, local community and other stakeholders (Adams, 2014, Epstein, 2011);
- Reduce costs as the general goal reducing all costs is specified also in relation to identifying all the costs in the long-term perspective of business operations affecting the society and the environment, including all the costs: direct, indirect, hidden, external and publicly imposed (Rainey, 2006).

**Table 4:** Matrix relationship between Sustainable Economy Dimensions (SED) and Sustainable Business Goals (SBG)

<b>SBG</b> → <b>SED</b> ↓	Max. material and energy efficiency	Create value from waste	Zero waste & emissions	Deliver functionality rather than product ownership	Stakeholder satisfaction	Reduce costs
Circular economy		x			x	x
Substitute with renewables	x		x		x	x
Minimize consumption				x	x	
Maximize social and env. benefit	x	x	x		x	
Positive work experiences enhancing creativity & innovation					x	
Collaboration and sharing			x	x	x	
Factor 4	x	x	x			x

In Table 5 the matrix relations between Sustainable Business Goals (SBG) and Sustainable Technology and Business Innovation (ST&BI) principles are established and an open list of the ST&BI principles is listed as follows:

- Open, agile T&B innovation platforms, open models of technology and business in literature often cited as frugal, lean, sustainable, eco innovation and business models. Open innovation models (Chesbrough, 2003, 2006, 2014) integrate a significant number of players across multiple roles in the innovation process expanding beyond the limits of a single organization. Open innovation is a process that makes more effective use of internal and external knowledge in every organization (Chesbrough, 2014). The platform model is an open business and innovation model and considered as the most valuable kind of business model as it can inspire and motivate customers and developers and others to join the platform (Mendelson, 2014). Open innovation is an approach that seeks the systematic adoption of partnerships in the innovation process rather than resorting to internal R&D structures as in the classic model of innovation (Caetano & Amaral, 2011; Chesbrough & Appleyard, 2007).
- Use-oriented Product-Service Systems are based on the transition from products to use- oriented services which are aimed to redefine the relation with 'tangible' goods, by making them available without transfer of ownership with numerous examples and possibilities: hiring, leasing, pooling, shared consumption. It is the transition from ownership to usership (Sempels and Hoffman, 2013), often cited as "servicification, service transition, product-service systems (PSS), Integrated product service engineering" (Reim et al., 2015).
- Reuse, and recycle, also referred to as re-manufacture, up-cycle or down-cycle means reuse of non-renewable materials including fossil fuels, which means that waste and emissions are either avoided or up-cycled. Up-cycling (Bardy & Massaro, 2013) denotes up-cycling as a kind of recycling that produces materials of at least equal quality while down-cycling converting materials and products into new raw materials of lesser quality
- Eco-efficiency and eco-design in a broad manner, for companies means applying the principle of "doing more with fewer resources" and it applies to both products and services. It comprises "reconsideration

of the design of a product, a service or a process in order to decrease its environmental impact” (Sempels & Hoffman, 2013). Eco-design principles are based on the whole life-cycle approach and comprise considerations on the functionality of the product to improve usability and use efficiency, reduce the material and energy intensity and minimise the use of non-renewable resources, minimize toxic components, introduce durability, easy maintenance (Sempels & Hoffman, 2013).

- Value constellation platforms are related to reframing the company activity considering the stakeholders in the value constellation instead of the value chain alone (Sempels & Hoffman, 2013).
- Decouple product from revenue, i.e. decouple revenue generation from raw materials and energy consumption based on the approach 'guarantee of result' instead of the sale of the means to reach that result, which entails the transition from product to result based integrated solutions (Sempels & Hoffman, 2013).

**Table 5:** Matrix relations between SBG and ST&BI principles

<b>ST&amp;BI principles</b> <b>SBG</b> ↓	Open, agile T&B innovation (platforms)	Cradle- to-cradle	Use-oriented Product- Service Systems	Reuse, Recycle	Eco- efficiency Eco- design	Value constellation platforms	Decouple product from revenue
Max. material and energy efficiency	x			x	x	x	x
Create value from waste		x		x	x	x	x
Zero waste and emissions				x	x		
Delivery of functionality rather than product ownership	x		x			x	x
Stakeholder satisfaction	x	x	x			x	x
Reduce costs	x			x	x		

In Table 6 the matrix relations between ST&BI principles and Technology and Business Innovation Models are presented. Technology Innovation Model is defined by the innovation of products and innovation of process, while the business innovation model is represented by the innovation of the basic business model components: value proposition, value creation and delivery, and value capturing. The assertion is that with careful business model redesign and sustainable technology innovation it is possible for mainstream businesses to readily integrate sustainability into their business and for new start-ups to design and pursue sustainable business from the outset (Bocken et al., 2014).

**Table 6:** Matrix relations between ST&BI principles and Technology and Business (T & B) Models

<b>T &amp; B Model</b> →	Technology innovation		Business Model Innovation		
<b>ST&amp;BI principles</b> ↓	Product	Process	Value Propos	Value creation and delivery	Value Capture
Open T&B innovation (platforms)	x	x	x	x	x
Cradle-to-cradle	x	x			
Use-oriented Product-Service Systems			x	x	x
Reuse, Recycle	x	x			
Eco-efficiency Eco-design	x	x			
Value constellation platforms			x	x	x
Decouple Product from Revenue			x	x	x

## 4. CONCLUSION

As result of the review of the literature and analysis of main concepts introduced in this paper, we come to the conclusion that the concepts of sustainable innovation and sustainable business are converging. It is difficult to draw a line as innovation is understood as commercialization of invention (idea), referring to its market introduction and transfer. Focus on technology and innovation for economic growth and socio-economic development puts stress on technology innovation for achieving sustainable socio-economic development. "Research and experimental development (R&D), when appropriately valorised, lead to technological innovation in the form of new products and processes, which contribute to growth, competitiveness and job creation, and which produce other societal benefits" (Delanghe & Muldur, 2014). Relevant practice review shows that sustainability benefits are achieved often only through combining several approaches, e.g. car sharing without an efficiency focus (e.g. fuel efficiency as a new technology) is unlikely to enhance sustainability since the vast majority of its environmental impacts are in the use phase, not in the manufacturing of the machine (Bocken et al., 2014). Synergy effects are present by combining sustainability efforts at both technology and business innovation.

It is also ascertained that not all the technological solutions are in line with SD goals. The necessity to develop sustainable technological innovation and sustainable business models based on the Triple Integrated Equation involves a change and rethinking of our traditional technology and innovation models. The "idea to idea", "cradle-to-cradle" and complete "life cycle assessment- LCA" concepts and approaches (Sempels & Hoffmann, 2013) introduced in the early phases of research and development and innovation processes, lead to sustainable business solutions in the complete life cycle perspective - idea, innovation, market, exploitation, end of life, new ideas for the next innovation cycle. The solutions emerging from practice indicate new principles with an integrated aim of sustainability and embedded in both business and technological domains.

## REFERENCES

- Adams, C. A. (2014). Sustainability and the Company of the Future, In *Reinventing the Company in the Digital Age*. Open mind, BBVA, 411-430.
- Bagus, A. & Manzilati, A. (2014). Social Entrepreneurship and Socio-entrepreneurship: a Study with Economic and Social Perspective. *Procedia - Social and Behavioral Sciences*, 115, 12 – 18.
- Bardy, R. & Massaro, M. (2013). Eco-social business in developing countries: the case for sustainable use of resources in unstable environments. In McIntyre, J. R., Ivanaj, S., Ivanaj, V. (eds.) *Strategies for Sustainable Technologies and Innovations*, Edward Elgar, 139-168.
- Bocken, N.M.P., Short, S.W., Rana, P., Evans, S. (2014). A literature practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56
- Boons, F. & Ludeke-Freund, F. (2013). Business models for sustainable innovation: the state of the art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9-19.
- Brundtland Report. (1987). *Our Common Future: Report of the 1987 World Commission on Environment and Development*. Oxford, Oxford University Press
- BRW. (2015). *BRW list of 50 most innovative companies*. Retrieved from: <http://www.brw.com.au/lists/50-most-innovative-companies/2015/>
- Caetano, M. & Amaral, D. (2011). Roadmapping for technology push and partnership: A contribution for open innovation environments. *Technovation*, 31, 320-335.
- Callon, M., Millo, Y. & Muniesa, F. (2007). *Market devices*, Oxford: Blackwell.
- Cetindamar, D., Phaal, R. & Probert, D. (2009). Understanding technology management as a dynamic capability: a framework for technology management activities. *Technovation*, 29, 237-246.
- Chesbrough, H. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Cambridge, MA: Harvard Business School Press.
- Chesbrough, H. (2006). *Open Business Models*. Cambridge, MA: Harvard Business School Press.
- Chesbrough, H. (2014). Open Innovation: Striving for Innovation Success in the 21st Century, in *Reinventing the Company in the Digital Age*. Open mind, BBVA, 395-410.
- Chesbrough, H. & Appleyard, M. (2007). Open Innovation and Strategy. *California Management Review*, 50 (1), 57-76.
- Delanghe, H. & Muldur, U. (2014). Research and experimental development (R&D) and technological innovation policy. In Durlauf, S. N. & Blume, L.E. (eds.), *The New Palgrave Dictionary of Economics, Online Edition*.
- Epstein, M. J. & Roy, M. (2001). Sustainability in Action: Identifying and Measuring the Key Performance Drivers. *Long Range Planning* 34, 584-604.
- Fast Company (2015). *Fast Company 50 most innovative companies 2015*. Retrieved from: <http://www.fastcompany.com/section/most-innovative-companies-2015>
- Fast Company (2016). *Fast Company 50 most innovative companies 2016*. Retrieved from: <http://www.fastcompany.com/most-innovative-companies>



- Field, B. C. & Field, M. K. (2006). *Environmental Economics: An Introduction*. New York: McGraw Hill/Irwin.
- FORBES Innovative companies (2016). *FORBES list of 100 most innovative companies*. Retrieved from: <http://www.forbes.com/innovative-companies/>
- Hall, J. K., Daneke, G. A. & Lenox, M. J. (2010). Sustainable Development and Entrepreneurship: Past Contributions and Future Directions. *Journal of Business Venturing*, 25, 439-448.
- Jackson, T. (2009). *Prosperity without growth: Economics for a Finite Planet*. Earthscan, London.
- Levi Jakšić, M. (2015). Sustainable Innovation of Technology and Business Models: Steps Toward Rethinking Technology and Business Strategy. *Proceedings ASECU, Openness, Innovation, Efficiency and Democratization*, Cracow University of Economics, 282-293.
- Levi Jakšić, M. (2006). The New paradigm of Technology and Innovation Management. *Management*, 43, 28-38.
- Levi Jakšić, M. (2007). Technology Innovation Management for Sustainable Business Development. In B. Rakita, S. Lovreta, M. Petković (eds.), *Proceedings of International Conference: Contemporary Challenges of Theory and Practice in Economics*, Ekonomski fakultet, Beograd, 155-167.
- Levi Jakšić, M. (2012). Innovation Entrepreneurship for Sustainable Development. In Tipurić, D. & Dabić, M. (eds). *Management, Governance and Entrepreneurship – New Perspectives and Challenges*, London: Access Press, 487-508.
- McIntyre, J. R., Ivanaj, S., & Ivanaj, V. (2013). Introduction: Foundational considerations in balancing innovatory processes and sustainable development practices in comparative light. In McIntyre, J. R., Ivanaj, S., and Ivanaj, V. (eds.) *Strategies for Sustainable Technologies and Innovations*, Edward Elgar, 21 – 50.
- Mendelson, H. (2014). Business Models, Information Technology and the Company of the Future. In *Reinventing the Company in the Digital Age. Open mind, BBVA, 2014*, 63-83.
- Moore, G. (2014). The Nature of the Firm – 75 Years Later. In *Reinventing the Company in the Digital Age, Open mind, BBVA, 2014*, 51-61.
- Osterwalder, A. & Pigneur, Y. (2005). *Clarifying business models: origins, present and future of the concept*. Commun, AIS 15.
- Popa, H. L. (2014), Integrative innovation as core determinant for sustainable progress. *Procedia – Social and Behavioral Sciences*, 124, 460 – 467.
- Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior performance*. New York: Free Press
- Rainey, D. (2006). *Sustainable Business Development*. Cambridge: Cambridge University Press.
- Reim, W., Parida, V. & Otqvist, D. (2015). Product-Service (PSS) business models and tactics – a systematic literature review. *Journal of Cleaner Production*, 97, 61-75.
- Ricart, J. (2014). Business Models for the Companies of the Future. In *Reinventing the Company in the Digital Age, Open mind, BBVA, 2014*, pp. 134-146.
- Sempels, C. & Hoffman, J. (2013). *Sustainable Innovation Strategy - creating value in a world of finite resources*. London: Palgrave Macmillan.



## CORPORATE SOCIAL RESPONSIBILITY: PHILANTHROPY, OBLIGATION OR UTILITARIANISM?

Vesna Stojanović-Aleksić<sup>1</sup>, Aleksandra Bošković\*<sup>2</sup>,

<sup>1</sup>PhD, Associate professor, Faculty of Economics, University of Kragujevac

<sup>2</sup>MSc, Assistant, Faculty of Economics, University of Kragujevac

\*Corresponding author, e-mail: aboskovic@kg.ac.rs

---

**Abstract:** *This paper examines the basic motives for the implementation of CSR, with a special emphasis on the relationship between motives and the level of engagement in this area. The aim is to explore the interdependence between the various motives and the level of development of specific CSR aspects in the context of its internal and external dimensions. Our findings indicate that CSR in general, and especially internal CSR are more developed when management is primarily motivated by ethical factors, while certain aspects of external CSR are on a higher level in companies whose management highlights strengthening brand and image as the most important motivators. Also, CSR is lower when adopted standards are the main motivators. The contribution of the paper is reflected in the different perspective of problem area, and in the discovery of new insights, which are the basis for future research, but also useful information for management.*

**Keywords:** *corporate social responsibility, motives, sustainable business, philanthropy, obligation, utilitarianism*

### 1. INTRODUCTION

Are the motives for corporate social responsibility (CSR) truly philanthropic, or is it just a cover for the achievement of some other, primarily financial or market objectives? Devinney (2009) believes that an enterprise cannot be truly socially responsible, even in the narrowest sense and that the concept of CSR is an oxymoron, just because corporations must balance between the different interests, which are, by their nature, conflicting, and it is naive to believe that their activities are designed according to the requirements of society. Companies actually manipulate social, in order to achieve their own goals. The author presents a rather extreme position, believing that paradigm *do-well-by-doing-good* reflects an unrealistic goal, a noble idea, which is unfeasible in practice.

Contradictory situations, in which the motives of CSR come into question, often occur in practice. The behavior of some well-known multinational corporations, in countries where the law does not sufficiently protect employees, consumers and the environment, is the subject of a negative public criticism. On the one hand, companies state that social responsibility is a key set of values, which they aspire to. On the other hand, they implement activities that are legal in underdeveloped parts of the world, but significantly deviate from the generally accepted code of ethics, as for example: difficult working conditions, inadequate reward system, non-implementation of environmental standards and so on. Likewise, many companies hire graduates as volunteers, thus emphasizing providing opportunities for learning and gaining experience to young people. However, the question remains whether this is the right motive, or the motive is the reduction of labor costs. It is very difficult to give a precise answer on these questions of ethical nature.

There have been made significant research efforts in the area of corporate social responsibility (European Commission, 2011; Devinney, 2009; Aguilera et al., 2007; Porter & Kramer, 2006; Kotter & Lee, 2005; Garriga & Mele, 2004; Carroll, 1999; Committee for Economic Development, 1971; Freeman, 1984; Davis, 1967; Bowen, 1953), but there are still doubts regarding the real motives and goals of these activities (Dare, 2016; Petrenko, 2016; Aguilera et al., 2006; Munilla & Miles, 2005;), as well as their effects on business performance (Surroca et al., 2010; Margolis et al., 2007; McWilliams & Siegel, 2000), but also on the environment and society. Therefore, it is necessary to further investigate the field of CSR of business organization. Particularly relevant issue relates to the underlying factors that motivate management to take initiatives in this area, since it affects the course of action and the level of CSR. Bearing in mind the lack of evidence of this interdependence in the previous research, the work is driven by the desire to overcome the

perceived gap, as well as to emphasize a different perspective on CSR, taking into account the motives that drive this activity, which is the main research subject.

According to determined subject, the basic aim of the research is to determine the extent to which differences in the level of CSR development occur as a result of differences in terms of the key CSR motives. Derivative goal is to explore the underlying factors that motivate management to undertake CSR activities, and to determine how they affect the level of internal and external social responsibility.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Attempts to define corporate social responsibility began in the mid-twentieth century, but even today there is no universally accepted definition. One of the first definitions is given by Howard R. Bowen (1953): "*Social responsibility refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society*". However, the conceptualization of social responsibility as the obligation is subject to denial in contemporary approaches. One of the latest interpretation of the concept of CSR is one by the European Commission (2011, p.3.) that explains social responsibility as a concept in which companies voluntarily integrate social and environmental issues in their business operations and in their interaction with stakeholders. So, it is about activities that cross the border of obligations prescribed by law, and are based on altruism and philanthropy. The company should be responsible in relation to its internal and external environment, and to all stakeholders, such as employees, business partners, suppliers, customers, governments, non-governmental organizations, who represent the interests of local communities and the environment, and society in general. But above all, they must be able to make a profit that allows a sustainable competitive position. In order to achieve this, CSR must be effectively managed and supported by adequate organizational structures (Vlastelica Bakić, et al., 2015).

Although the socially responsible behavior is often seen in the context of external responsibility towards the environment, we should not neglect the inner dimension which mainly relates to employees. *Internal dimension of social responsibility* involves taking care of employees' health and safety at work, beyond the limits imposed by law. It includes respect for individual differences and problems that members of the collective are facing, promoting humanity and concern for people, which is not limited to the working hours but also includes an attempt to achieve a balance between work, family and leisure time. Extremely important dimension of internal responsibility relates to equal opportunities for training and learning. *External dimension of social responsibility* applies to all external stakeholders, ranging from clients to business partners, local communities, and national levels, and often the wider regional and even global environment (Stojanović-Aleksić & Bošković, 2015).

In answering the question of why companies implement social responsibility, we should start from the results of previous studies, which point to the various factors of motivation. First, it is useful to consider the main benefits of this way of doing business for the company, since they can represent important motivators. In the market economy and extreme competition in the global market, economic motives play an important, and perhaps even the most significant role in making decisions on the implementation of socially responsible activities, which is totally understandable. After all, companies are profit organizations, and it is illogical to expect from them to take actions that are inconsistent with the goal of achieving positive financial results. No matter what, the economic dimension is still the first one within the pyramid of social responsibility (Carroll, 1991). However, the link between CSR activities and financial performance is very difficult to measure, and previous research has lead to conflicting results. A group of authors conducted a meta-analysis that included 192 studies on the above relationship, and a survey showed the existence of a positive, statistically significant but small effect ( $r = 0.132$ ) of the CSR on financial performance (Margolis et al., 2007). Present difficulties in quantifying this interdependence are primarily reflected in the fact that the financial effects of social responsibility are difficult to measure in the short term, and that this area of business, by creation of intangible resources, has many positive implications in the long term. An organization directly or indirectly generate a series of benefits through CSR, including: strengthening the brand, improving the image, strengthening the ability to attract, motivate and retain employees and consumers (Kotter & Lee, 2005, p.12), which in the long run leads to a reduction in operating costs and improvement of the competitive position (Porter & Krammer, 2006). Besides the enhancement of the share in the domestic market, CSR can be seen as a determinant of international success (Mitic, 2007). In terms of globalization, public pressure is growing and forcing international companies to coordinate their activities with the requirements of the community. In fact, CSR is not an innovation any more, since vast majority of international and multinational companies apply this concept. Moreover, it is one of the key prerequisites for success in the global marketplace. In addition, irresponsible behavior, if it finds the condemnation of the public and consumers, mainly causes high

losses, which are difficult to compensate. Accordingly, the potential positive effects, even in a very long period, are far more profitable than any possible harm to the company. In addition, studies have shown that the involvement of companies in socially desirable activities, leads to greater employee satisfaction (Koh & Boo, 2004) and their positive emotions (Onkila, 2015). Therefore, social responsibility can play an important role in retaining existing workforce, but also in attracting new high-quality workers, affecting the perception of people on the organizational culture as friendly and humane.

However, social responsibility should not be seen only as a means to improve business results. Aguilera et al. (2006) distinguish between instrumental, relational and moral CSR motives. The *instrumental motives* are related to the previously explained efforts to reach certain financial benefits by engagement in CSR. *Relational motives* are related to conformation with emerging industry norms, while *moral motives* explain the tendency to be operating in accordance with the beneficiaries' best interests. Managers, encouraged by moral motives, engage in CSR due to a higher purpose to help humanity. Particular attention should be paid to the interdependence of CSR motives and the level of CSR development. Starting from this presented model, Dare (2016) analyzed the impact of these three groups of motives on CSR commitment and proved that firms with a dominant moral motive tend to hold a higher commitment to CSR than firms with a dominant instrumental motive.

On the other hand, Munilla & Miles (2005) started from the theoretical framework developed by Van Marrewijk (2003), which is shown in Table 1. However, they classified motives into three groups: *strategic motives*, referring to the observation of social responsibility as an investment in improving operations and competence; *compliance driven motives*, referring to the observation of CSR as an obligation to society and *force driven motives*, ie. CSR expenditures perceived as a "tax" being mandated by NGOs or other external stakeholders that will diminish the firm's ability to create value for other relevant stakeholders. The same authors argue that strategic orientation can positively affect employees' contribution to creating added value for customers and the local community, while observing CSR as forced may adversely affect the motivation of employees, which leads to the alienation of certain groups of customers and a negative reputation among stakeholders, who represent the local community. Compliance driven motives showed no particular impact on any aspect of social responsibility.

Table 1: CSR motives according to Van Marrewijk (2003)

CSR motives	
<b>Compliance</b>	CSR as a social obligation - perception of CSR expenditures as simply a cost.
<b>Profit</b>	CSR as a strategic initiative - using CSR to create competitive advantage and superior financial performance. CSR expenditure perceived as an investment.
<b>Caring</b>	Using CSR to balance the triple bottom line of profits, people, and planet. Social and/or environmental responsibility trumps economic responsibility.
<b>Synergistic</b>	Use of CSR to attempt to create a "sustainable corporation". Social and/or environmental responsibility is strategically used to create competitive advantage and meet the corporation's economic responsibilities.
<b>Holistic</b>	CSR as a corporate culture. Social and/or environmental responsibility is strategically used to create competitive advantage and meet the corporation's economic responsibilities.

Source: Munilla, L.S., Miles, M.P. (2005). The Corporate Social Responsibility Continuum as a Component of Stakeholder Theory, *Business and Society Review*, 10 (4), p. 377.

Starting from the presented theoretical conceptualization and the results of previous research, we occupy a relatively different perspective on the problem. In this paper, we analyze several major groups of motives for CSR. Primarily, these are *instrumental motives*, which include strengthening the brand and corporate image, improving competitive advantage and increase of profits. Instrumental motives are viewed as utilitarian, because they are based on the principle of utility. Observation of CSR as a mean for achieving these goals can result in a greater involvement of the company in all aspects of external CSR, since activities, such as humanitarian actions, actions with the aim of contributing to culture, sports, environmental protection and publication of information about CSR, are often widely promoted and can directly affect financial results. The second group refers to *philanthropic motives*, which in this study encompass the tendency to increase employee satisfaction, and the different motives of moral or ethical character. Companies, whose management is encouraged by these reasons for investing in CSR, should have a higher level of internal CSR, i.e. concern for the welfare of employees. Besides, it can be expected that these motives have a positive effect on all aspects of CSR. The third category refers to an *obligation* to meet the requirements of adopted international quality standards. The paper starts from the assumption that these reasons, in the

absence of other motives, indicate an underdeveloped awareness of the importance of CSR and can have a negative impact, both on internal, and on external social responsibility.

Starting from the theoretical foundations and the results of previous empirical results, we developed a set of hypotheses which are practically tested. The hypotheses are:

*H0: The level of CSR will be different among companies, if there are different CSR motives.*

*H1: The level of internal social responsibility will be higher, if the motives are philanthropic.*

*H2: The level of external social responsibility will be higher, if the motives are instrumental.*

*H3: The level of CSR will be lower if CSR is viewed solely as an obligation to respect the adopted international quality standards.*

### **3. DATA AND METHODOLOGY**

#### **3.1. Methods for data collection and processing**

Besides an overview of the current domestic and foreign literature, in order to develop an adequate theoretical basis as the starting point, we realized an empirical research by distributing the questionnaire in the period from March to June 2015. The sample consisted of 24 corporations, including 80 respondents, managers of various hierarchical levels in corporate sector in the territory of the Republic of Serbia. Their answers are the primary data, based on which we derived conclusions on various aspects of CSR, as well as the most important CSR motives.

Data analysis was performed using relevant methods and techniques of software Statistical Package for Social Sciences (SPSS) 20.0. We analyzed the structure and characteristics of the sample, using descriptive statistics. Reliability of a scale was analyzed using Cronbach's Alpha coefficient, with the calculated reliability of measurement scales, which amounts to 0,890, indicating a high degree of reliability, since the questionnaire consists of 30 items. One-way ANOVA was applied in order to test the hypothesis, i.e. to determine statistically significant differences in terms of social responsibility in corporation with different dominant CSR motives.

As an instrument for data collection, we used an adapted questionnaire that consists of 30 questions. The starting point for creating questionnaire are empirical studies conducted by the Dam & Scholtens (2012), Oh et al (2011), Sánchez et al (2011) and a questionnaire of Serbian Chamber of Commerce, developed for comprehensive research in order to select the most prominent organizations in this field. Renovated structure of the questionnaire is the result of authors' original scientific approach, according to a defined subject and objectives of the research. *The first part* of the questionnaire includes questions on key CSR dimensions. The respondents answered the questions, on the basis of the degree of agreement with the statements, using a five-point Likert scale. *Second part* consists of closed questions about CSR motives. General information about respondents were collected from the five questions that make up *the third part* of the original questionnaire, and relate to gender, age, position in the organization, years of service and level of education.

#### **3.2. Sample**

On the basis of random selection, we contacted more than 60 companies and distributed 233 questionnaires. However, 80 respondents from 24 companies responded the call. Genders are equally represented in the sample. The most numerous are the respondents in the age category 36-45 years (48.8%) and the sample mainly consists of respondents with 16-25 years of service (38.8%). As for formal position, operational managers (51.3%) are dominant in the sample, immediately followed by middle management (42.5%), while the top management ranks 6.3 % of the sample. The low percentage of members of the highest level is caused by difficulties in contacting these subjects, as well as their poor motivation for participation in scientific research.

#### 4. RESULTS AND DISCUSSION

According to Central limit theorem, variables are approximately normally distributed, because sample contains a large number of observations ( $n=80$ ). Hence, we applied One-way ANOVA to compare statistically significant differences between multiple subsamples, i.e. to determine differences in terms of CSR in corporation with different dominant CSR motives. Levin's Test (Table 2) confirms the assumption of the homogeneity of variance ( $p>0,05$  for each CSR aspect and CSR-total).

**Table 2:** Test of Homogeneity of Variances

	Levene Statistic	p
Internal CSR	1,284	,280
Customers	1,915	,102
Environment	,598	,701
Community	2,359	,051
CSR disclosure	1,237	,301
CSR - total	,453	,810

Source: Authors

The most important results of ANOVA and appropriate descriptive indicators are presented in the Table 3 and analyzed below. Also, we derived conclusions about the relationship between the CSR motives for and the level of CSR development, in accordance with the objectives of the research.

**Table 3:** Differences between CSR dimensions depending on CSR motives

CSR dimensions	Motives	Brand and image		Competitive advantage		Profit		Employee satisfaction		Moral and ethics		International standards		F	p	$\epsilon^2$
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD			
Internal CSR	Internal CSR	3,28	0,64	3,10	0,53	2,95	0,69	2,71	0,90	<b>3,67</b>	0,52	2,50	0,30	<b>4,74</b>	<b>0,00</b>	<b>0,24</b>
	Customers	4,22	0,63	4,10	0,60	3,90	0,62	3,90	0,26	4,26	0,64	4,00	0,16	0,96	0,45	
	Environment	3,75	0,72	3,55	0,83	3,80	0,84	3,30	0,76	3,78	0,71	3,00	0,59	1,12	0,36	
	Community	<b>4,55</b>	0,68	3,55	0,98	4,04	0,94	4,10	1,05	4,10	1,19	2,95	1,45	<b>2,73</b>	<b>0,03</b>	<b>0,16</b>
	CSR disclosure	<b>3,52</b>	0,84	2,31	0,76	2,88	1,22	2,63	0,88	2,95	1,04	2,44	0,72	<b>2,69</b>	<b>0,03</b>	<b>0,15</b>
CSR - total		<b>3,86</b>	0,51	3,36	0,53	3,52	0,59	3,33	0,61	3,78	0,62	<b>2,98</b>	0,41	<b>2,93</b>	<b>0,02</b>	<b>0,17</b>

Source: Authors

Statistically significant differences were identified in three out of five observed aspects of CSR, namely internal CSR ( $p = 0.00 < 0.05$ ), responsibility to the community ( $p = 0.03 < 0.05$ ), and CSR disclosure ( $p = 0.03 < 0.05$ ), as well as at full scale CSR ( $p = 0.02 < 0.05$ ). Also, we calculated Eta square for each aspect and results indicate high influence in Internal CSR ( $\epsilon^2 = 0.24$ ), Community ( $\epsilon^2 = 0.16$ ), CSR disclosure ( $\epsilon^2 = 0.15$ ), as well as in CSR total ( $\epsilon^2 = 0.17$ ).<sup>1</sup> Therefore, the basic hypothesis **Ho is confirmed**. In addition, the level of internal CSR is the highest in companies whose management stated morals as the most important reason for CSR (Mean = 3.67). However, internal CSR is not that high if employee satisfaction is the most important motive. Thus, this result **partially confirms the hypothesis H1**. Responsibility to the community, as well as disclosure of CSR are the most developed in enterprises, in which CSR is seen as a means of improving the brand name and image (Mean = 4,55; Mean = 3,52), as one of instrumental motives. Based on these results, the **hypothesis H2 is partially confirmed**, since no significant differences were identified in all aspects of external social responsibility. Also, other instrumental motives are not proved to be that important for the level of these two CSR aspects. All three statistically significant aspects, as well as the overall CSR are the least developed in companies where management pointed out fulfilling the requirements of international standards as the main CSR motive. Hence, **H3 is confirmed**. These results are in accordance with previous research which suggest that investment in CSR is generally connected to those areas and aspects of the business that can generate economic value through social engagement (Dare, 2016, p.95).

Particularly interesting result refers to the fact that the overall corporate social responsibility is on a higher level in companies where the strengthening of the brand and image is stated to be the main motive (Mean = 3.86). This result speaks of profit-orientation of domestic companies, thus indicating utilitarianism as the

<sup>1</sup> According to Cohen (1988, p.284-287.) 0,01 is low, 0,06 is medium and 0,14 is high influence.

most significant set of motives for CSR. However, the high level of overall CSR is also present if the philanthropic reasons are viewed as the primary motivating factors for engaging in this field (Mean = 3.78). This means that the management is highly aware of multiple importance of CSR for the success of the company, but also values socially responsible initiatives as a kind of contribution to society, encouraged not only by adopted standards, but also by the ethical reasons. However, it should be noted that philanthropic motives should not be seen as the most important factor that leads to the implementation of socially responsible business, since companies still represent profit-oriented organizations, whose survival and development depend on the achieved results.

## 5. SCIENTIFIC AND PRACTICAL CONTRIBUTION

The *scientific contribution* of this paper is reflected in shedding more light on the corporate social responsibility from a theoretical point of view. The study provides relevant insights into the interdependence of CSR motives and the level of CSR, thus expanding the knowledge base in this field. These findings provide the basis for identifying strengths and weaknesses in terms of CSR in Serbia. Results also indicate the level of investment in certain aspects of social responsibility, depending on the underlying CSR motives. The results have multiple *practical implications*, as well. They indicate the need for management to expand the awareness about the importance of this approach to business. Also, the contribution is reflected in providing the basis for defining measures to improve socially responsible practices in both CSR dimensions.

## 6. LIMITATIONS AND FUTURE RESEARCH

The inevitable limitations of the research are identified. First disadvantage stems from the limitations of the survey, as a technique for data collection, primarily from the subjectivity of respondents. This is particularly expressed in this kind of research connected to ethical issues. Also, reluctance of representatives of companies to participate in scientific research speaks of underdeveloped cooperation between academic and professional public, which significantly complicates each research in field of business and management. As new knowledge always leads to new relevant questions, the results of this study also encourage new ideas. In future research, it would be interesting to analyze these issues in more detail, considering the interdependence between motives. Due to the fact that the sample was drawn from one specific area, this research could be extended to other countries in order to make comparative analysis and to improve the generalizability of the conclusions.

## 7. CONCLUSION

The results of this study are consistent with initial proposal that the level of CSR is influenced by firm's motive to engage in CSR. Specifically, we partially confirm the hypothesis that the level of internal CSR is higher in companies where philanthropic motives are dominant. Likewise, second hypothesis is partially supported because significant differences are identified only in two out of four CSR aspects, pointing to strengthening of brand and image as the most important motive in companies where external CSR highly developed. Still, external CSR is not that high in companies where increase in profit and competitive advantage are the most significant CSR motives. Findings indicate that high level of CSR in general is achieved in companies where dominant motives are those connected with the acquisition of various types of benefits for the enterprise, such as the promotion of the brand and corporate image, increase in profits and competitive advantage, which we defined as utilitarian motives, as well as in those where philanthropic motives are the most highly rated, while CSR is low in the companies where these activities are viewed as a necessity of fulfilling the obligations imposed by adopted international standards.

We can conclude that utilitarian motives play the most significant role in CSR. In this regard, it is important to emphasize that utilitarianism is different from egoism. Namely, it is not only about the aspirations to achieve good for one side (owners). It is true that management in this way, by investing in CSR, strives to contribute to the goal of maximizing profits, but also creates value for other stakeholders, i.e. for society as a whole. Social responsibility as such, in business organizations, must comply with economic interests, but it is necessary for the management to be aware of importance of CSR for the entire society. Likewise, CSR should not be taken as an obligation, since it represents an investment in the creation of sustainable competitive position. Initiatives in this area, in the long term, contribute to a number of benefits for the company and they make it easier for management to balance the interests of different stakeholders.

## REFERENCES

- Aguilera, R.V., Rupp, D. E., Williams, C. A. & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: a multilevel theory of social change in organizations, *Academy of Management Review*, 32(3), 836-863. DOI: 10.2139/ssrn.567842
- Aguilera, R.B., Williams C.A., Conley, J.M., & Rupp, D.E. (2006). Corporate Governance and Social Responsibility: a comparative analysis of the UK and the US. *Corporate Governance: An International Review*, 14(3), 147-158. DOI: 10.1111/j.1467-8683.2006.00495.x
- Bowen, H. R. (1953). *Social Responsibilities of the Businessman*. NewYork: Harper&Row
- Carroll, A. B. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*, 34(4), 39-48. DOI:10.1016/0007-6813(91)90005-G
- Carroll, A.B. (1999). Corporate social responsibility – evolution of a definitional construction. *Business and Society*, 38(3), 268–295.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum
- Commission of the European Communities, (2001), *Communication from the Commission to the Council, the European Parliament and the Economic and Social Committee*. Brussels: EUR-Lex(Official Journal of the European Communities)
- Commission Of the European Communities, (2001), *Green Paper - Promoting a European framework for Corporate Social Responsibility*, Brussels
- Committee for Economic Development, (1971), *Social Responsibilities of Business Corporations*, New York
- Dare, J. (2016). Will the Truth Set Us Free? An Exploration of CSR Motive and Commitment. *Business and Society Review*, 121(1), 85-122. DOI: 10.1111/basr.12082
- Davis, K. (1967). Understanding The Social Responsibility Puzzle. *Business Horizons*, 10(4), 45-50. DOI:10.1016/0007-6813(67)90007-9
- Devinney, T.M. (2009). Is the Socially Responsible Corporation a Myth? The Good, the Bad, and the Ugly of Corporate Social Responsibility. *Academy of Management Perspectives*, 23(2), 44-56. DOI: 10.5465/AMP.2009.39985540
- European Commission, (2011), *Communication from the Commission to, the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*, Brussels: EUR-Lex(Official Journal of the European Communities)
- Freeman, R.E. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman
- Garriga, E. & Mele D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, 53(1-2), 51-71. DOI 10.1023/B:BUSI.0000039399.90587.34
- Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2007). *Does it pay to be good? A meta-analysis and redirection of research on corporate social and financial performance* (Working Paper). Boston: Harvard Business School
- McWilliams, A. & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review*, 26(1), 117–127. DOI: 10.5465/AMR.2001.4011987
- Mitić, S. (2007). Korporativna društvena odgovornost kao determinanta međunarodnog uspeha. *Ekonomika preduzeća*, 55(1-2), 81-92.
- Munilla, L. S. & Miles, M. P. (2005). The Corporate Social Responsibility Continuum as a Component of Stakeholder Theory. *Business and Society Review*, 110(4), 371–387. DOI: 10.1111/j.0045-3609.2005.00021.x
- Koh, H.C. & Boo, E.H.Y. (2004). Organizational ethics and employee satisfaction and commitment. *Management Decision*, 42(5), 677-693. DOI: <http://dx.doi.org/10.1108/00251740410538514>
- Kotler, P. & Lee, N. (2005). *Korporativna društvena odgovornost – učiniti najbolje za svoju kompaniju i za izabrani društveni cilj*. Beograd: Hesperia
- Petrenko, O. V., Aime, F., Ridge, J., & Hill, A. (2016). Corporate Social Responsibility or CEO Narcissism? CSR Motivations and Organizational Performance. *Strategic Management Journal*, 37(2), 262-279. DOI: 10.1002/smj.2348
- Porter, M. & Kramer, M. (2006). Strategy and Society – The Link between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 84(12), 78-92.
- Onkila, T. (2015). Pride or Embarrassment? Employees' Emotions and Corporate Social Responsibility. *Corporate Social Responsibility and Environmental Management*, 22(4), 222–236. DOI: 10.1002/csr.1340.
- Stojanovic-Aleksic, V. & Boskovic A. (2015). Corporate social responsibility: the experience of Serbia and the European Union. In M. Jakšić, V. Stojanović Aleksić, & P. Mimović (Eds.), *Economic and social aspects of Serbia joining the European Union* (255-268), Kragujevac: Faculty of Economics.
- Surroca, J., Tribo, J.A., & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal*, 31(5): 463 - 490. DOI: 10.1002/smj.820
- Vlastelica Bakić, T., Cicvarić Kostić, S., & Nešković, E. (2015). Model for Managing Corporate Social Responsibility. *Management*, 74, 47-56. DOI:10.7595/management.fon.2015.0002



# THE IMPORTANCE OF ETHICS OF THE BUSINESS ORGANIZATIONS FOR SUSTAINABLE BUSINESS DEVELOPMENT

Ivana Erić

Belgrade Business School – Higher Education Institution for Applied Studies  
e-mail: ivana.eric@bbs.edu.rs

**Abstract:** *The purpose of the paper is to show the importance of ethics of business organizations for sustainable business development. Aside from presenting theoretical background, this work offers the results of the empirical research. This paper shows the results of Kranet project which was conducted in 3845 companies. It also presents research about perceptions on business ethics in Serbia which were gained by interviewing 194 respondents in 5 economic organizations. The results of Kranet project are showing that our country is below the average of EU countries in the number of report on corporate social responsibility and codes on ethics. Similarly, the Business Ethics Index is under the value of 100 which suggests that our respondents feel that business ethics of organizations is relatively bad. Many areas of business ethics are precondition for sustainable business development. Only simultaneous work on economic, environmental and social initiatives can ensure the sustainable business development.*

**Keywords:** *sustainable business development, business ethics, business responsibility, loyalty, perceptions of business ethics*

## 1. INTRODUCTION

During the last decades the issue of corporate business sustainability has been increasingly receiving importance in the academic, but also in the business circles. Today, more than ever, business organizations are having an important role in encouraging sustainable development. The essence is that in modern conditions of the ruthless competitive struggle, business organizations have to ensure satisfying the needs of individuals, creating jobs and the continuous development of their own business opportunities.

In that sense, corporate business sustainability searches for ways of how business can contribute to the goals of sustainable development and how provocative opportunities can be integrated into corporate sustainability activities. Responsibility toward environment, consumers, employees, shareholders, government, lobby groups, social responsibility and others belongs to the area of business ethics in all modern organizations. Many questions of the ethics of business organizations are directly related to the issues of sustainable business development. Modern organizations report every year through the Global Reporting Initiative about their activities in sustainable business development. Similarly, many organizations inform the public about its activities in the area of corporate social responsibility and other ethical questions. In both cases, the intention of organizations is to obtain the loyalty of all interested stakeholder, as well as key assumptions for the success and long-term capacity for the sustainable business development.

In continuation of the work it will be shown the basic concept of the sustainable business development and the model of business ethics, how should be pointed out the importance of ethical image of the organization for sustainable business development. In addition, it will be shown the results of the research project Kranet about the existence of written reports on corporate social responsibility and business ethics. Finally, in this paper will be presented the perceptions of business ethics in Serbia which were gained through research conducted on 194 respondents in five economic organizations in Serbia.

## 2. THEORETICAL BACKGROUND ABOUT SUSTAINABLE BUSINESS DEVELOPMENT AND BUSINESS ETHICS

Generally speaking, sustainable development can include an organizations economic, environmental and social initiatives in ensuring the future, and if it is possibly better future. *James (2001) think that "purpose of the economic development is to generate wealth, especially for poorer people, in ways that are compatible with the systematic eliminating pollution of the environment and nature and contribute as much as we can to the meeting of human needs in our society" (p. 77).* In that sense, corporate business sustainability seeks ways how business can contribute to the goals of sustainable development and how to integrate provocative opportunities into corporate sustainability activities.

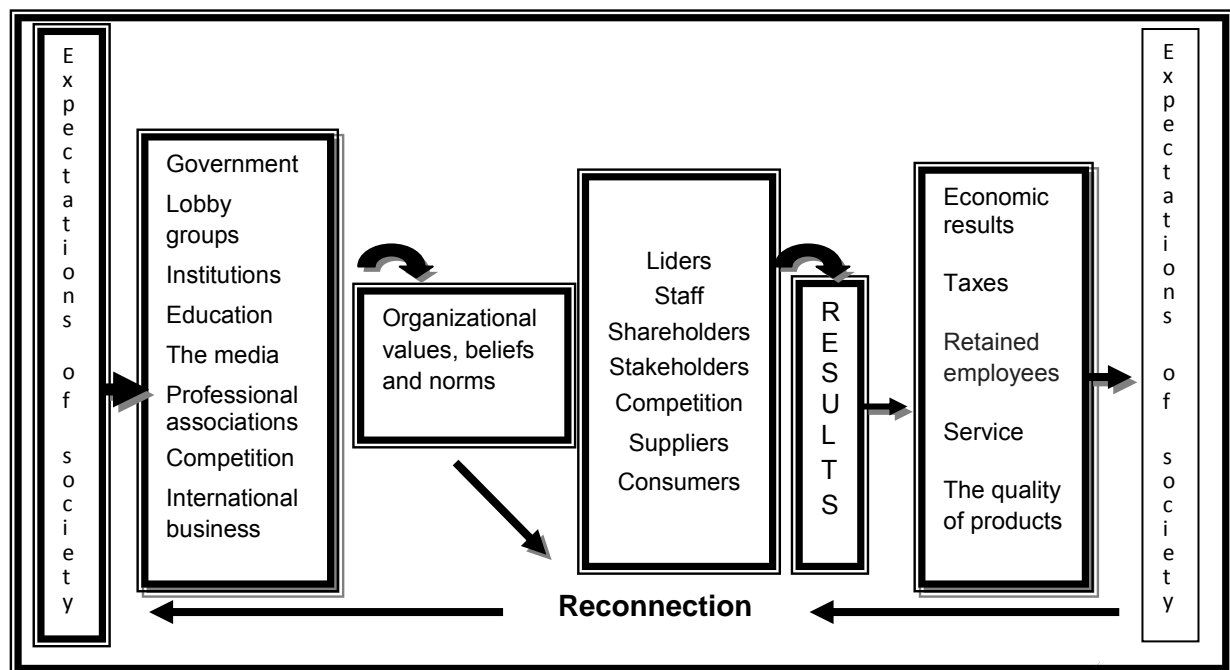
The essence is that organizations can achieve business objectives with respect for their economic, social and environmental duties. According to *Rainay (2010) "sustainable business development involves formulating and implementing business strategies, innovations and initiatives to help create a more*



sustainable world. It is philosophical perspective that permanent every aspects of what corporation is, the job of management is not supervision, but leadership" (p. 29). Another interesting view is presented by Linton and others (Linton, Klassen and Jayaraman, 2007) who see sustainable business development as "using resources to meet the needs of the present without compromising the ability of future generations to meet their own needs" (p. 1076). In fact, all definitions have in common existence of ethical leadership, which will seek to create a better world for all members of the human community with respect to the economic purpose of business organizations.

On the other side, ethics of business organizations basically includes economic, environmental and social responsibility. According to its essence, it is not oriented only towards better economic results, but also to satisfy the interests of all concerned stakeholders. In some cases, business organizations can consciously accept the loss of profit for the sake of positive ethical image. Holmes (2008) pointed out that „business ethics can be defined as a set of moral principles for decision-making within the organization's values, which should explain the principles of conduct in accordance with standards of right and wrong" (p. 249). According to Thoms (2008) business ethics is "the systematic study of business ethics perspective, referring to the need, and should not, and suggests the existence of standards above and beyond regulation" (p. 419). "Business ethics is the study of conflict, the conflict between the economy and values between competition, trade and capitalism, between morality, integrity, and accountability" (Wheeler, Fabig and Boele, 2002, p. 298).

It is obvious, that none of presented definitions are not able to explain all the complexity of this phenomenon, partly due to the influence of different perspectives on ethics. Instead, Svensson and Wood (2008) are proposed the model of business ethics which seeks to explain the phenomenon of business ethics and the ways in which we, as a society, interact with the concept (p. 303). It is transformational, simultaneous, continuous, iterative process of creating three main components: the expectations, perceptions and evaluations, which are connected with five subcomponents (expectations, organizational values, norms and beliefs; outcomes, assessment of society and reconnection). So there does not exist real final end of this model, but instead it represents the permanent reconnection and evaluation of all parts of this continuous process (Figure 1).



**Figure 1:** A model of business ethics (Svensson and Wood, 2008., p. 304)

The first component of a model are expectations of society about the expression of organizational behavior that allows further progress of the community in the realization of a higher level of well-being. The second component of the model consists of expectations: legislation, lobby groups, institutional responsibility, higher levels of education, media, socially responsible managers, professional associations, competition and international business with integrity. The legislation includes a whole set of laws for the creation of acceptable business behavior in the community. Lobby groups have the power to spread information, gathering disgruntled individuals and the destruction of individual business enterprise. The institutional responsibility of organization implies their participation in creating better society, through the concept of social responsibility and the creation of new laws, not just as an economic responsible entity. Enlarged level of education is predominantly a tool for change expectations, therefore it is necessary to discuss and

rationalize a number of questions. Socially responsible managers are required for contemporary organizations, and the managers who will do the right thing, make the right decisions and engage in actions that society expects, not because of fear of punishment, but because of its personal feeling. Professional associations have rules that are binding and protect all members, for the sake of achieving the highest standards of conduct in all organizations they work for. At the end, competition expects fair, just and clean fight. However, it often happens that organizations use cunning tactics, for the sake of increasing market share and survival in general.

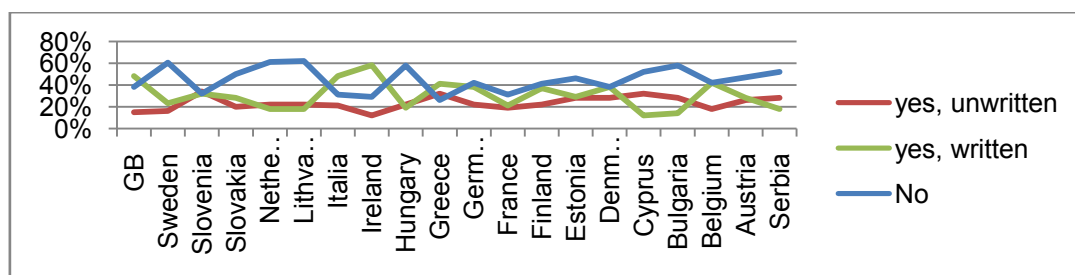
The third component of the model - the organizational values, norms and beliefs, were created partly through affirmation of the characteristics of its members, and partly were based on expectations of stakeholders. The fourth components of model are perceptions, i.e. the way in which society perceives the behavior of organizations as ethically vs. unethically. Perceptions are considered through relationships of organizations with leadership, employees, shareholders, suppliers, customers, competitors and other stakeholders. The outcomes or results are the fifth component of the model, which measure not only a level of profit, but primarily the influence of the organization on society, through its activities or inactivity. Finally, the sixth component includes the evaluation and assessment of the organizational performances by members of society. The criteria used in the evaluation are the following: economic performance, respect for the law, retention of employees and consumers, acceptability of products and evaluation of society.

After evaluation of results of the organization it will be formed a new level of expectations (usually higher), in terms of organizational functioning, which becomes a basis for judging about ethics in the next cycle. Very often the assessment of one cycle will lead towards the creation of new laws, which will set more obstacles for illegally and immorally behavior.

The importance of business ethics for sustainable business development is undoubtedly great in the opinion of many scientists and companies. *Researchers cite the following essential reasons or motives for ethical behavior of modern organizations in terms of sustainable business development: organizational reputation, motive of managers, employees motive and the motive of investors (Trevino and Nelson, 1999; Weiss, 1998). The influence of the media on the ethical image of the organization is significant with respect that it publicly expresses positive and negative examples of ethical action, and thus it tries to create public opinion. (American Management Association, 2006). Managers care about ethics because they can face with serious problems in the prevention and management of unethical behavior of employees. Employees, who perceive to work for something "more" than the mere profit, demonstrate a higher degree of loyalty, satisfaction, better communication and commitment to the organization (Ethics Resource Center and Hay Group, 2012). Finally, investors and owners have motives to think about the ethics of the organization. They invested their capital, so it is realistic to expect that they can ask questions such as: "Does the organization achieve higher profit?, and/or "Does the organization achieve profit in an ethical way?". Any kind of unethical activities can jeopardize the reputation of the organization and thus it can decrease the rate of return on investments. All this reasons imply that are very important to behave on the ethical way if the organizations want to have sustainable business development.*

### 3. RESEARCH

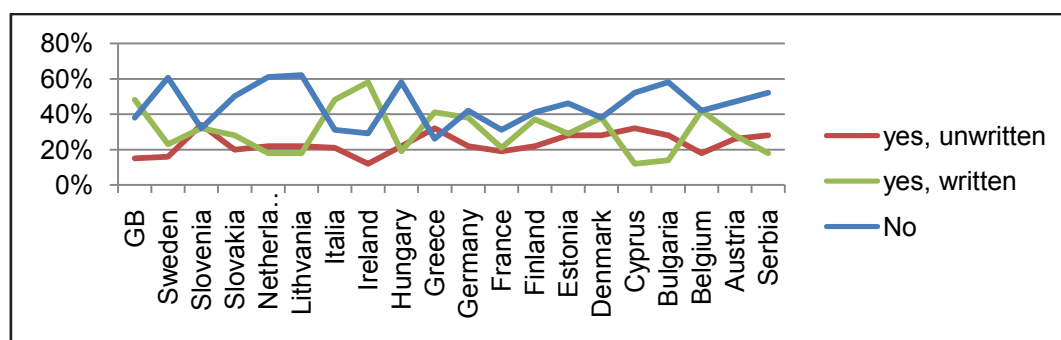
The only comprehensive study, which attempted to investigate the current situation in the field of business ethics in our country, is the research conducted at the Faculty of Economics in Subotica in cooperation with Cranfield School of Management from the UK. *The survey was conducted in the period 2008-2010., on a sample of 20 countries of the European Union and Serbia and a total of 3845 companies (Economic Faculty of Subotica, 2011).* The research was aimed at obtaining answers to the question about the existence of written statements of corporate social responsibility and the written code of ethics. Respondents answered the question: "Does your company have a statement on corporate social responsibility?". The possible responses were: Yes, written; Yes, unwritten; and No. The research results are shown in Figure 2.



**Figure 2:** The existence of a written report on corporate social responsibility (*Economic Faculty of Subotica, 2011*)

The average of the European Union countries, concerning the existence of statement on corporate social responsibility is 55.2%, of which 32% is written and 23.2% is unwritten. Our country is a little under the average with only 46.1% of organizations which have statement on corporate social responsibility, i.e. 17.9% is written and 28.2% is unwritten. It is very devastating fact that even 53.8% of the surveyed organizations do not have a statement of corporate social responsibility. The best countries are the United Kingdom (47.5%), Ireland (58.3%), Italy (47.4%) and Belgium (41.9%), in terms of the written statement on corporate social responsibility. The former socialist countries like Slovakia, Hungary, Bulgaria and Serbia have shown significantly lower incidence of the declaration on CSR (between 14% and 28%) or moderate level of oral statements about CSR (between 22.7% and 34%).

On the other hand, the same study asked the question: "Does your organization possess a code of ethics?". Respondents were answered with: Yes written; Yes, unwritten; No. The results are shown in Figure 3.



**Figure 3:** The existence of written codes of ethics (*Economic Faculty of Subotica, 2011*)

Situation is much better when we compare existence of written codes of ethics with written report on corporate social responsibility. The average of the European Union is 60%, of which 45.1% of the organizations possess written, and 24.9% of the organizations have unwritten codes of ethics. Significant negative deviation from the average of the EU demonstrate Netherlands (9.5% of written codes of ethics), Germany (37.7% of written codes of ethics), and Austria (25.5%). The only logical explanation would be that the above mentioned countries have highly developed ethical values as a part of the organizational culture, because their business practice are regulated systematically. Perhaps because of this, organizations do not feeling the need for formal prescribing of ethical values. However, the question arises to what extent was the code of ethics real implemented, or whether only represents a formal document. The future will give us the answer to such a complex issue.

The second research was conducted by the author of this paper and within there were analyzed past and future perceptions about business ethics in Serbia. *The research lasted for about 7 months, in period from March to November 2012 (Eric, I., 2014).* The technique of direct structured interviews was applied, due to lack of adequate secondary information's, and for all respondents were guaranteed anonymity.

**Table 1:** Socio demographic structure of the respondents

Organizations	Eco	Piraeus	Marfin	Deles	Simpo	Sum
Frequency (percentage)						
Number of respondents	13(6,7%)	35(18,04%)	41(21,13%)	72(37,11%)	33(17,01%)	194(100%)
<b>Gender</b>						
Male	8(61,54%)	11(31,43%)	20(48,78%)	33(45,83%)	16(58,58%)	88(45,36%)
Female	5(38,46%)	24(68,57%)	21(51,22%)	39(54,16%)	17(51,51%)	106(54,64%)
<b>Sum</b>	13(100%)	35(100%)	41(100%)	72(100%)	33(100%)	194(100%)
<b>Education</b>						
Secondary educ.	6(46,15%)	4(11,43%)	8(19,51%)	28(38,89%)	11(33,33%)	57(29,38%)
High education	5(38,46%)	11(37,43%)	10(24,39%)	32(44,44%)	12(36,36%)	70(36,28%)
Doctoral educ.	2(15,38%)	20(57,14%)	23(56,09%)	2(2,78%)	10(30,30%)	57(29,38%)
<b>Sum</b>	13(100%)	35(100%)	41(100%)	72(100%)	33(100%)	194(100%)
<b>Age</b>						
Young	4(30,79%)	13(37,14%)	8(19,51%)	28(38,89%)	6(18,18%)	59(30,41%)
Mean age (30-50)	5(38,46%)	15(42,86%)	10(24,39%)	29(40,28%)	15(45,45%)	74(38,14%)
Older (50+)	4(30,79%)	7(20%)	23(56,1%)	15(20,83%)	12(36,36%)	61(31,44%)
<b>Sum</b>	13(100%)	35(100%)	41(100%)	72(100%)	33(100%)	194(100%)

(Source: Calculation of author)

Perceptions of individuals about the level of business ethics in companies were examined through a special construct called Business Ethics Index (BEI - Business Ethics Index). The index measures the sensation (perception), current and future attitudes of consumers or clients on the overall situation of ethical business practices. It consists of four components: BEI personal/past, BEI vicarious/future, BEI personal/future and BEI vicarious/past. The formula to calculate BEI personal/past and BEI vicarious/past is (Tsahuridu and Seaton, 2006, p. 320):

$$\frac{(\% \text{ very ethical} - \% \text{ very unethical}) + (\% \text{ somewhat ethical} - \% \text{ somewhat unethical})}{2} + 100 \quad (1)$$

Calculation of vicarious / future and personal / future will do according to the following formula:

$$(\% \text{ more ethical} - \% \text{ more unethical}) + 100 \quad \dots(2)$$

The final BEI (Business Ethics Index) is obtained by adding relative value components of the index and dividing by four. All final value of BEI, which are more than 100 demonstrate positive perceptions about the level of business ethics in organizations, and below 100 bad images about the ethical practices of organizations. The remainder of this paper will present the results of research.

**Table 2:** Perception of business ethics on the basis of perception in past

	Based on past experience, the business is generally observed		%	Based on what you heard in the past business is observing		%
Very unethical	51		26	51		26
Somewhat unethical	90		46	46		23
Neither ethical nor unethical	6		3	17		9
Somewhat ethical	37		19	138		70
Very ethical	12		6	24		12

(Source: Calculation of author)

Table 2 presents the data for the value of the components BEI, which are related to the experience of individuals with regard to the practice of business ethics in the past. On this basis, we can say that is the past BEI = 69, which means that our respondents think that business ethics in the past was very bad observed by all parameters.

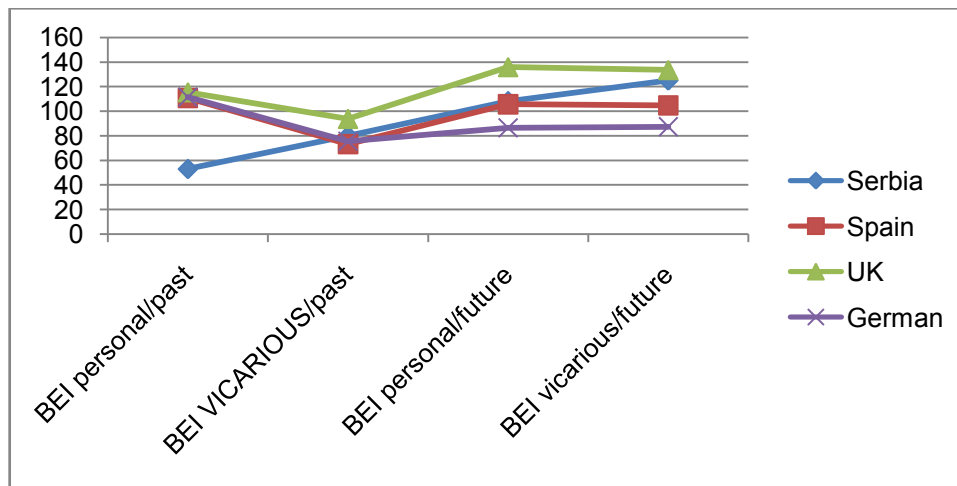
**Table 3:** Perception about business ethics in the future

	Based on your previous experience what do you expect		%	Based on what you've heard, business will act in the future		%
More unethical	42		21	43		22
Same	96		49	61		31
More ethical	58		30	92		47
Sum	196		100	196		100

(Source: Calculation of author)

Table 3 shows the values for the components of BEI, which refer to the attitudes of individuals for the practice of business ethics in the future. Based on the results, we can say that is the future BEI = 117, and that the respondents believe that organizations in our country will become more ethical.

Calculating the value of BEI past and BEI future by previously presented formula we find that the value of the BEI index for our country is 91. This value suggests how our respondents feel that business ethics of organizations on our territory is relatively bad. However, the main reason for such a very small value of BEI - less than 100, is a result of bad BEI past. Expectations on ethics of business organizations in our country are very positive, as can be clearly observed through the current practices of organizations.



**Figure 3:** The value of BEI components for four countries (**Source:** Calculation of author)

Figure 3. shows the components of the index of business ethics for the four countries (Calculation of author on the own research; Tsalics and Seaton, 2006). By comparing data we can say that Serbia has the lowest value of the components of BEI personal/past, which shows that personal experience of business ethics in the past is very bad. It is interesting to note that all other values are more than the value of countries such as Spain and Germany, which should be seen as a "highly ethical". Therefore, according to the opinion of the author of this paper, our country is not "much worse" than other countries with developed market economy, as well as many individual claims. Moreover, we can expect a bright future in terms of ethics of business organizations, which operate in our country.

#### 4. CONCLUSION

In this paper is shown all the importance of ethics of business organization for sustainable business development. Organizational reputation, satisfaction of managers, employees loyalty and the interest of investors for investing depend on the ethical image of the organization. Positive perceptions about ethics of the business organizations will be precondition for sustainable business development. It means that any kind of moving forward (in business sense) is not possible without trust of all interested stakeholders and, also it is indispensable that organization behaves in ethically acceptable way. The paper offers the results of the two empirical researches. The first researches are showing that our country is below the average of EU countries in the number of report on corporate social responsibility and codes on ethics, which is not so bad result. The second research about the business ethics suggests that our respondents feel that business ethics of organization in our county is relatively bad. These results are not surprising. Very high level of unemployment, economic crisis, problems with payment debts, problems with creating new business opportunities and others, have placed requirements in front of many organizations with a view to create mere economic survival. In those conditions, just brave organizations can integrate economic, environmental and social initiatives in ensuring the better future.

#### REFERENCES

- American Management Association. (2006). The ethical enterprise: Doing the right things in the right ways, today and tomorrow- A global study of business ethics 2005 – 2015. Retrieved from <http://www.amanet.org/HREthicsSurvey06.pdf>
- Ekonomski fakultet Subotica. (2011). Baza podataka istraživačkog tima Kranet projekta. Retrieved from <http://kranet.org>.
- Erić, I. (2014). *Etičko-moralne orijentacije ponašanja čoveka i organizacione kulture*. (Doktorska disertacija). Ekonomski fakultet Subotica, Srbija.
- Ethics Resource Center, & Hay Group. (2010). Ethics and employment engagement – 2009: National business ethics survey. Retrieved from <http://ethics.org/files/u5/NBESResearchBrief2.pdf>.
- Holmes, C. (2008). Business ethics –Part one: Does it matter?. *Industrial and Commercial Training*, 40(5), 248-252. doi.org/10.1108/00197850810886487
- James, P. (2001). Towards sustainable business? In M. Charter,& U. Tischner (Eds.), *Sustainable solutions: Developing products and services for the future*, 77-97. Sheffield, UK: Greenleaf Publishing.
- Linton, J. D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 25(6), 1075-1082. doi:10.1016/j.jom.2007.01.012

- Rainey, D. L. (2010). *Sustainable business development: Inventing the future through strategy, innovation, and leadership*. Cambridge, England: Cambridge University Press.
- Svenson, G., & Wood, D. G. (2008). A model of business ethics. *Journal of Business Ethics*, 77(3), 303-322. doi: 10.1007/s10551-007-9351-2
- Thoms, J. S. (2008). Ethical integrity in leadership and organizational moral culture. *Leadership*, 4(4), 419-442. doi: 10.1177/1742715008095189
- Trevino, L. K., & Nelson, K. A. (1999). *Managing business ethics: Strait talk about how to do it right* (2nd ed.). New York: John Wiley and Sons.
- Tsalics, J., & Seaton, B. (2006). Business ethics index: Measuring consumer sentiment toward business ethics practices. *Journal of Business Ethics*, 64(4), 317-326. doi: 10.1007/s10551-005-4667-2
- Weiss, J. W. (1998). *Business ethics: A stakeholders and issues management approach* (2nd ed.). Orlando, Florida: The Dryden Press, Harcourt Brace & Co.
- Wheeler, D., Fabig, H., & Boele, R. (2002). Paradoxes and dilemmas for stakeholder responsive firms in the extractive sector: Lessons from the case of Shell and the Ongon. *Journal of Business Ethics*, 39(3), 297–318. doi:10.1023/a:1016542207069



# CONSISTENCY OF THE EUROPEAN COMMISSION'S ASSESSMENT OF PROPOSED MERGERS IN AIRLINE SECTOR

Danica Babić<sup>\*1</sup>, Dejan Pavlović<sup>2</sup>

<sup>1</sup>University of Belgrade – Faculty of Transport and Traffic Engineering

<sup>2</sup>University of Belgrade – Faculty of Political Science

\*Corresponding author, e-mail: d.babic@sf.bg.ac.rs

**Abstract:** *This paper provides an overview of the merger cases in the airline industry that the European Commission has dealt with during the past decade with respect to the conclusions and the remedies applied. Airline mergers play a key role in the EU airline industry and represent regular way for airlines to restructure, become more efficient, productive and, in the long-run, to survive in the market. However, antitrust law underpinning mergers in EU market sometimes may seem like a limiting factor of the fair and free market development. The analysis of the merger cases in EU presented in this paper raises a number of interesting legal and economic questions related to the consistency in application of the criteria for assessing the mergers.*

**Keywords:** *airline mergers, EU Commission, EU common market, competition, remedies*

## 1. INTRODUCTION

For many years air transport was a tightly regulated industry, where investment and operating decisions were highly constrained. Under regulation period, the airlines did not have the freedom to set prices, frequencies and routes, while the market entry and exit was strictly controlled. In Europe, the airlines were state-owned and all international routes were arranged by bilateral agreements between the respective governments. The deregulation and liberalization of the European Union (EU) market has significantly changed the competitive environment and the nature of the airline competition. In the years following the deregulation, the number of competing airlines entered the market, fares significantly dropped and passengers' choices multiplied. However, over the last 20 years, many of the national airlines did not survive, some have withdrawn or been acquired by other airlines. Others, however, were restructured and developed into a full-service carriers (FSCs), became much stronger and continued to compete. Even if the first effect of deregulation was the emergence of new competitors, very soon many airlines began to merge resulting in much higher concentration of the contemporary airline industry in comparison to the pre-deregulation era.

The air transport sector is inherently oligopolistic. There is very high base cost in this type of services, while the consolidation of a carrier's operations at a large hub airport has various operational and cost advantages, such as reduced expenses due to fewer technical facilities for aircraft maintenance, scheduling advantages, etc. (Kociubinski, 2013). Economy of scale is in the nature of air transport.

Mergers and acquisitions intensified after the air transport deregulation and represent an important structural adjustment for the sake of an airline's competitiveness. Merger is often seen as a possible means for improving airline's efficiency and productivity. It provides an opportunity for restructuring, a more efficient allocation of resources, for achieving economy of scale and scope by extending marketable networks, enhancing access to markets, etc. (Iatrou & Oretti, 2007). There are also the benefits for consumers that arise from the larger networks with more frequent and convenient flights. Very often, mergers were one means of solving the financial difficulties of the airlines, that if there would be no merger led to its bankruptcy and withdrawn from the market. With that withdrawing from the market it would be lost of one competitor anyway, resulting in less competition than it would be if the merger is approved.

However, mergers may also have negative effects on competition in the market, by reducing the number of competitors, that can lead to weakening the competition (caused by the increased market power of emerged airline) and creating more barriers to entry. Although, merger can lead to impairment of competition in the short term, if this happens and there are no significant barriers to entry, the market forces will ensure the recovery of competition in the long term (Begović, 2010).

All this can result in the more concentrated market than it was before the merger occurred, but the prohibition of the merger can nullify all the potential benefits considering airline's efficiency. This is why antitrust authorities must balance these conflicting interests when deciding whether to approve a merger or not. The

aim of this paper is to assess the European Commission's approach with respect to consolidation (mergers and acquisitions) in the European airline sector and the application of the EU competition law in the cases of proposed mergers. Special consideration will be given to the proposed and applied remedies in cases when Commission was reluctant to sanction the merger.

## 2. MERGERS IN AIRLINE SECTOR IN EU

The competition law of the EU is primarily based on the Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU) from 2007. According to the Article 102, "Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States". Furthermore, it provides, *exempli causa*, types of abuses that are particularly problematic: a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; b) limiting production, markets or technical development to the prejudice of consumers; c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

The evolution of the EU competition law related to the mergers and acquisitions effectively started with the adoption of the Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings, also known as the Merger Regulation. The objective of the Regulation was to establish a system that would ensure the competition in the internal market is not distorted. This is the core of the principle of open market economy with free competition, embedded in the Article 4(1) of the EC Treaty. The Regulation should apply only to significant structural changes, with an impact on the market that goes beyond the national borders of any one Member State. Such concentrations should be reviewed exclusively at the EU level. The Merger Regulation represented the new Community competence, while the chief beneficiary of the new development was the European Commission. Before the passage of this piece of legislation, Commission had extensive authority in other areas of the competition policy, but no formal authority in merger control.

The current Council Merger Regulation (EC) No 139/2004 of 20 January 2004 builds on the achievements of its predecessor, the enlargement of the EU, aiming at further development of the internal market and prevention of those concentrations which may significantly impede effective competition in the common market. As to the scope of application of the Regulation, it should be defined according to the geographical area of activity of the undertakings and be limited by quantitative thresholds – targeting those concentrations that have a Community dimension. The Commission is authorized to set and implement relevant criteria, but those criteria should be developed in a way that protect competition interests of the Member States and take due account of legal certainty. While the Commission has exclusive competence to apply the Regulation, its decisions are subject to review of the ECJ.

One of the main preliminary questions we face in our analysis relates to the definition and understanding of the *relevant market* in the EU competition law. The main aim of the Regulation was to prevent "significant impediment to effective competition" within the Common market. Such distortions happen when a subject establishes and abuses a dominant position that effectively restricts the competition in provisions of certain goods or services. What constitutes the dominant market position was defined in case *United Brands v. Commission* (Case 27/76, 1976), when ECJ found that dominant position "relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers." (para. 65). According to the Commission notice on the definition of relevant market for the purposes of Community competition law (97/C 372/03), there are two dimensions of relevant market in EU competition law – geographic market and product market. A relevant geographic market comprises the area in which the firms concerned are involved in the supply of products or services and in which the conditions of competition are sufficiently homogeneous.

A relevant product market comprises of all those products and/or services which are regarded as interchangeable or substitutable by the consumer by reason of the products' characteristics, their prices and their intended use. The key distinction is between time-sensitive passengers and non-time-sensitive passengers.

In its judgement in "Hoffman-La Roche v. Commission" case (CJEU, Case 85/76 (1979), the Court of Justice held that "the concept of relevant market in fact implies that there can be effective competition between the products which form part of it and this presupposes that there is a sufficient degree of interchangeability



between all the products forming part of the same market in so far as a specific use of such products is concerned.” (para. 28).

Over the period 2004-2015, the EC has examined 21 merger proposals that took place in the airline sector in the EU. According to the EC reports, each merger or acquisition was examined on its own merits and on a case-by-case basis. However, there is some general approach that can be in common for all investigated proposals that includes definition of the relevant market, analysis of the effects that the proposed merger would have on competition in the relevant market and final decision making. The EC may approved (with or without conditions and obligations) or prohibit the proposed merger.

Analyzing merger proposals it can be noted that 8 of them (38%) are allowed without any conditions. Clearances subject to conditions and obligations happen in 10 cases (48%), while the prohibition happened only 3 times (14%). Figure 1 shows the evolution of the mergers in the airline industry that was under the EC investigation over the 12 years concerned. The number of mergers and acquisitions that occurred in Europe is not significant in comparison to the US market. Nowadays, the top five airlines in US – United, Delta, American Airlines and Southwest Airlines – are holding over the 80% of domestic seating capacity as a result of mergers, while over 53 percent of the European market is shared between the top six airlines. One of the reasons for that is certainly the fact that is much easier to do mergers in a single country in comparison to the situation in the EU where many governments are involved in protecting their national airlines.

Conditions and obligations are actually remedies determined in order to eliminate the competition concerns identified by the EC. Of course, they have to be designed not to hinder the potential efficiency gains from the merger. In order to determine the adequate remedies the EC must predict with reasonable certainty which elements will recover competition after completion of a merger. The effectiveness of a remedy depends on whether or not they return the market to the same competition level as existed before the merger. The most common remedies applied by EC in the merger cases can be distinguished between the slotsrelated, facilities related (access to Frequent Flyer Programmes and other agreements – interlining, block-space, etc.) and other commitments.



**Figure 1: Mergers in EU (2004-2015)**  
\*WCO –with conditions and obligations

## 2.1. Approved mergers with conditions and obligations

The list of all mergers that are proposed and considered by the EC is shown in Table 1. For each proposed merger it is indicated the year when the decision is made by the EC and in the case of the approval with conditions and obligations the applied remedies are listed.

The first airline cross-border merger in the EU was the one between two major airlines Air France and KLM. These two airlines announced their decision to create a new airline on 30 September 2003, and EC gave the clearance to merge subject to conditions on 11 February 2004. According to EC report, the airlines have complementary networks and only 14 routes are identified that will suffer from the significant reduction or elimination of competition. In order to maintain competition on the routes affected by the merger, EC approved remedies which include that both parties had to give up 47 pair of slots per day at the airports Paris Charles de Gaulle and Amsterdam Schiphol, (Case No COMP/M.3280, 2004).

In May 2005 German national carrier Lufthansa and Swiss International Air Lines announced that Lufthansa will acquire the majority of the shares in, and sole control of, Swiss. The EC's merger investigation raised

concerns about a number of intra-European routes where it may come to significant reduction or elimination of competition. In particular, the routes Zurich- Frankfurt and Zurich- Munich, and on some long-haul routes to the US, South Africa, Thailand and Egypt are most jeopardized by these potential mergers. They also took into account the impact of Lufthansa's close co-operation with members of the Star Alliance. Two months later the EC approved this merger subject to conditions and both parties committed themselves to give up slots at the airports of Zurich, Frankfurt, Munich, Düsseldorf, Berlin, Vienna, Stockholm and Copenhagen, (Case No COMP/M.3770, 2005).

**Table 1:** Airline mergers in EU since 2004

Merger	Year	Decision	Remedies
Air France/KLM	2004	Approved WCO	<ul style="list-style-type: none"> <li>• 47 pair of slots at the airports Paris and Amsterdam (31 roundtrips per day) for the routes:</li> <li>• 1 roundtrip for each route from Paris to Detroit and Lagos and from Amsterdam to New York, Atlanta and Lagos</li> <li>• 26 roundtrips from Amsterdam to Paris, Lyon, Marseille, Toulouse, Bordeaux, Milan, Rome, Venice and Bologna</li> <li>• Access to Merged Entity's FFP for use by new entrants on the identified routes.</li> </ul>
Lufthansa/Swiss	2005	Approved WCO	<ul style="list-style-type: none"> <li>• Airport slots for long-haul city pairs at Zurich airport for 7 roundtrips to Boston, Chicago, Los Angeles, Johannesburg, Bangkok and Cairo.</li> <li>• Slots at Zurich airport for 35 roundtrips to Frankfurt, Munich, Dusseldorf, Berlin (Tegel), Hamburg, Hanover, Vienna, Stockholm, Copenhagen, Warsaw and Bucharest.</li> <li>• Access to Merged Entity's FFP for use by new entrants on the identified routes.</li> </ul>
Lufthansa/Eurowings	2005	Approved WCO	<ul style="list-style-type: none"> <li>• Slots at Vienna and Stuttgart airports for 7 roundtrips for particular routes Vienna-Stuttgart, Vienna-Cologne, Stuttgart-Dresden.</li> </ul>
Ryanair/Aer Lingus	2007	Prohibited	
KLM/Martinair	2008	Approved	
Delta Airlines /Northwest Airlines	2008	Approved	
Iberia/Vueling /Clickair	2009	Approved WCO	<ul style="list-style-type: none"> <li>• 46 roundtrips in the identified European routes: <ul style="list-style-type: none"> <li>• from Barcelona to Venice, Roma, Nice and Athens</li> <li>• from Madrid to Venice and Naples</li> <li>• from Ibiza to Paris</li> </ul> </li> <li>• 104 roundtrips in the identified Spanish routes: <ul style="list-style-type: none"> <li>• from Barcelona to Malaga, Santiago de Compostela, Seville, Granada and Oviedo</li> <li>• from Bilbao to Malaga, Ibiza and Seville</li> <li>• from Ibiza to Seville and Valencia</li> <li>• from Alicante to Ibiza</li> <li>• from Seville to Valencia</li> </ul> </li> <li>• Access to iberia's FFP for use by prospective new entrants on the identified routes</li> </ul>
Lufthansa/Brussels Airlines	2009	Approved WCO	<ul style="list-style-type: none"> <li>• Slots at Brussels airport for 10 roundtrips for the routes to Frankfurt, Zurich, Hamburg and Munich.</li> <li>• Access to Merged Entity's frequent flyer program for use by prospective new entrants on the identified routes.</li> </ul>
Lufthansa/BMI	2009	Approved	
Lufthansa/Austrian Airlines	2009	Approved WCO	<ul style="list-style-type: none"> <li>• Slots at Vienna airport for 19 roundtrips to Frankfurt, Munich, Stuttgart, Cologne and Brussels.</li> </ul>
Iberia/British Airways	2010	Approved	
United Air Lines/Continental	2010	Approved	

Airlines			
Olympic/Aegean Airlines	2011	Prohibited	
IAG/BMI	2012	Approved WCO	<ul style="list-style-type: none"> <li>• Slots at the airport in London (Heathrow) for 12 roundtrips on:</li> <li>• the UK city-pair routes (from London to Edinburgh and Aberdeen), in total 7 roundtrips and</li> <li>• the other city-pair routes (from London to Cairo, Riyadh, Moscow and Nice), in total 5 roundtrips.</li> </ul>
US Airways/American Airlines	2013	Approved WCO	<ul style="list-style-type: none"> <li>• One daily slot pair at London Heathrow and Philadelphia airports.</li> </ul>
Ryanair/Aer Lingus	2013	Prohibited	
Olympic/Aegean Airlines	2013	Approved	
Delta Air Lines/Virgin Group/Virgin Atlantic Limited	2013	Approved	
Cesky Aeroholding/Travel Service/Ceske Aerolonie	2014	Approved	
Alitalia/Etihad	2014	Approved WCO	<ul style="list-style-type: none"> <li>• 2 daily slot pairs at Rome-Fiumicino and Belgrade airports to one or more interested new entrants.</li> </ul>
IAG/Aer Lingus	2015	Approved WCO	<ul style="list-style-type: none"> <li>• 5 daily slot pairs at Gatwick airport on routes from London to Dublin and Belfast.</li> <li>• Aer Lingus will continue to carry connecting passengers for competing airlines out of London-Heathrow, London-Gatwick, Manchester, Amsterdam, Shannon and Dublin.</li> </ul>

The same year EC approved another acquisition by German airline Lufthansa over the German airline Eurowings and its subsidiary, the low cost airline Germanwings. However, this clearance was conditional upon the parties to give up 7 pair of slots at Vienna and Stuttgart airports. In addition, EC conditioned the parties to allow competitors to participate with their flights on the affected routes in Lufthansa's Frequent Flyer Programme (FFP) with the aim of making entry more attractive, (Case No COMP/M.3940, 2005).

In January 2009, the EC approved under the EU Merger Regulation the proposed acquisition of the two Spanish low-cost airlines Vueling and Clickair by the Spanish national airline Iberia subject to conditions. The parties committed to release slots at Spanish airports (104 roundtrips) and other European airports (46 roundtrips) in order to address competition problems identified by the EC. The slots are linked to the particular routes in Spain and inside the Europe, where the proposed concentration would have led to a restriction of competition, (Case No COMP/M.5364, 2009).

In June 2009, EC gave clearance to acquisition by Lufthansa over the SN Brussels Airlines subject to conditions and obligations. In this case, the remedies that EC determined referred to the routes from Brussels to: Frankfurt, Zurich, Hamburg and Munich. Lufthansa agreed to offer the slots that would reduce the barriers to entry and allow new entrants to operate flights on each of the four routes where the EC identified concerns, (Case No COMP/M.5335, 2009).

In August 2009, Lufthansa officially took over the Austrian Airlines Group after the EC approved the proposed acquisition. The EC clearance is conditional upon the implementation of a set of remedies in respect to EC competition concerns on certain routes. The routes on which the EC was concerned that the transaction would result in consumers being faced with reduced choice and likely higher prices are from Vienna to Frankfurt, Munich, Stuttgart, Cologne and Brussels. In order to remove these competition concerns on all these routes, the parties commit to make slots available at the airports concerned that will account up to 19 roundtrips for new entrants, (Case No COMP/M.5440, 2009).

In 2012, the proposed acquisition of British Midlands (bmi) by IAG was approved by the EC, subject to conditions. The investigation showed that the proposed acquisition would have led to high market shares and even monopolies on a number of domestic, European and international routes out of London Heathrow airport. In order to modify the concentration so as to resolve the doubts identified by the Commission with a

view to having the merger cleared, the parties agreed to release 12 daily slot pairs at London Heathrow which could be used on the specific routes of concern, (Case No COMP/M.6447, 2012).

The only EC approval of the proposed merger between the non-EU airlines that was subject to condition was the one between US Airways and American Airlines. This clearance was released in August 2013, and the EC revealed the conditions that will adequately address the competition concerns identified by the EC. Namely, the EC's investigation found that the transaction would lead in particular to a monopoly on the London-Philadelphia route, where US Airways and American Airlines through its membership in a metal neutral joint venture with British Airways and Iberia. Both parties agreed to the release of one daily slot pair at London Heathrow and Philadelphia airports, and of other commitments in order to induce entry on the London-Philadelphia route, (Case No COMP/M.6607, 2013).

In November 2014, the EC approved Etihad's acquisition of joint control over Alitalia, subject to conditions. The decision is conditional upon both airlines' commitment to release slots to a new entrant at the airports of Rome -"Fiumicino" and Belgrade-"Nikola Tesla". The reason for this outcome is in the fact that Etihad also controls Air Serbia, which together with Alitalia, were the only carriers offering direct flights on the Rome-Belgrade route. The EC was concerned that this acquisition could lead to a monopoly on this route that will result in higher prices and a loss of service quality for passengers, (Case No COMP/M. 7333, 2014).

The most recent decision and also the clearance subject to condition released by the EC was about the proposed acquisition of Aer Lingus by International Consolidated Airlines Group (IAG). The EC concerns were raised about an insufficient competition on several routes that would be the result of this concentration. The EC's investigation also found that the merged entity would have prevented Aer Lingus from continuing to provide traffic to the long-haul flights of competing airlines on several routes. In order to adequately address all competition concerns identified, the parties committed to release the slots at Gatwick airport, while Aer Lingus will continue to carry connecting passengers to use the long-haul flights of competing airlines, (Case No COMP/M.7541, 2015).

## 2.2. Prohibited mergers

Since the EU Merger Regulation came into effect in 2004, three merger proposals were prohibited by the EC, under the explanation that each of them raises concerns on a number of overlapping routes and this would impede effective competition in the common market. It is interesting to examine what were the main EC findings that prevailed and led the EC to take a decision on the refusal of these particular merger proposals.

The first time when the EC decided to prohibit the airline merger was the one between the Irish low cost airlines Ryanair and Aer Lingus. On 30 October 2006, the EC was notified about a proposed concentration between Ryanair and Aer Lingus. The EC biggest concern about a proposed merger was that both airlines have a strong position in Ireland and on almost all routes they were the only two or the two main carriers active. In particular, the EC found that there would be 35 routes with very high market shares, from which for 22 routes the merger would create a monopoly. In addition, the EC found that there were a number of important entry barriers to operating flights from or to Dublin in competition with Ryanair/Aer Lingus, resulted from the well-established position at their home base. On the basis of the EC findings, Ryanair proposed the set of commitments in order to remedy the identified significant impediment to effective competition. The most interesting part is the slot related commitments where Ryanair offered to make available slots for the London-Heathrow route, in total 24-40 Dublin-Heathrow slots per day. Those slots would be exclusively reserved for British Airways and Air France (equally divided between them). Ryanair also committed to make available 4-8 slots for other overlap routes from and to Dublin, as well as a number of slots from/to Shannon and Cork airports. There were additional commitments related to operational concerns of the merged airline, such as the commitment not to increase the frequencies of any of the claimed overlap routes, to reduce Aer Lingus' short-haul fares by at least 10% immediately, to eliminate the fuel surcharges Aer Lingus applies on its long-haul flights immediately, to retain Aer Lingus' brand and to continue to operate Ryanair and Aer Lingus separately. Nevertheless, the EC concluded that: *"those commitments are not sufficient to remedy the identified significant impediment to effective competition and, thus, cannot render the proposed concentration compatible with the common market"*, (Case No COMP/M.4439, 2007).

In 2011, the EC received another merger proposition from two Greek airlines, Olympic and Aegean Airlines. Again, both airlines served from the same home base airport in Athens that resulted in a high number of overlapped routes. In its report, the EC noted that together the two carriers control more than 90% of the Greek domestic air transport market, which would discourage any new airline to enter the Greek market after the merger. In spite of the openhanded proposal by the merger parties in which they committed to make available a number of slots at Greek airports, the EC prohibited this concentration with the explanation that Greek airports do not suffer from the congestion, (Case No COMP/M.5830, 2011).

However, in 2013 the EC reconsidered the Greek merger case and after the investigation into the proposed acquisition of Olympic by Aegean Airlines, approved it. In spite of the EC concerns that the proposed transaction raised serious competition concerns on a number of Greek domestic routes, the EC explained that Olympic Air would be forced to exit the market in the near future due to financial difficulties if not acquired by Aegean. Either way Aegean would become the dominant airline on all the affected routes, (Case No COMP/M.6796, 2013).

Another takeover attempt by Ryanair on Aer Lingus occurred in 2009 but they withdrew the proposal. In 2012 they had their last attempt, but a year later the EC refused again their proposition with the justification that it would significantly impede effective competition on the market by creating a monopoly or a dominant position on 46 routes where, currently, Aer Lingus and Ryanair compete against each other. As a part of the proposal, Ryanair offered set of commitments in order to overcome the EC concerns, such as the transfer to Flybe of a number of assets such as cash of EUR 100 million, a lease for at least 9 Airbus A320 aircraft, airport slots (at origin and destination), a royalty-free, non-sub-licensable, non-exclusive and non-transferable license to the Aer Lingus trademark for 3 years, personnel, contracts, real estate etc. In addition, Ryanair offered to the cession of slots to IAG/British Airways at London airports, so that IAG/British Airways would operate on 3 routes (Dublin-London, Shannon-London, and Cork-London). However, the EC decided that these remedies do not address the competition concerns and were insufficient to ensure that customers would not be harmed on the relevant routes, (Case No COMP/M.6663, 2013).

### 3. DISCUSSION

The examination of the mergers under the EC jurisdiction raises some interesting questions, for example, what were the remedies applied in the cases when a merger is conditionally accepted by the EC and what were the proposed remedies in the cases when the merger is prohibited. In other words, was the EC consistent in assessing the remedies in both cases? What is in common for all prohibited proposals is the fact that those consolidations were initiated by airlines (two airlines in each case) that are well established, both coming from the same countries and using the same home base airport. This fact, per se, can lead to a result in a high market power and a high number of the overlapping routes. This is not in question. What could be in question is how the EC defined the relevant market in the cases when the parties do not have the same home base airport, but their home base airports are relatively close (e.g. Air France-KLM, Lufthansa-Swiss, Lufthansa-Brussels Airlines, etc.). Precisely, the EC conclusion in the Air France-KLM case was that the airlines' networks are largely complementary and that the new entity will not jeopardize the competition in the market. This is certainly the truth when the short-haul flight are considered, but the problem may arise on the mid and long-haul flights, where passengers are less sensitive to the travel time, and direct and indirect flight can be considered as substitutes. It is worth noting that in a time when the merger between these two airlines happens, they were Europe's second and fourth largest airlines with two major international hubs. The problem here was not whether to allow the two airlines to enter into a merger, but was the remedies agreed in this case adequately, due to the increased market power of the new airline. This question could be put in another way, if these remedies were enough in the case when two major European airlines merged, why the set of commitments offered by Ryanair were insufficient, having in mind that the commitments, inter alia, included a number of high-valued Heathrow slots.

Another interesting observation from the analysis is that in British Airways-Iberia case, when the merger is approved without any conditions. Again, both were the leading airlines in their countries with strong route networks inside and outside the EU market. In addition, British Airways and Iberia have been already members of the Oneworld alliance whereby they work together and linked up a substantial part of their networks and this was taken as a base for the EC investigation. According to the EC report no competition concerns are identified from the investigation of the overlaps of their networks for the post-merger structure. However, if one analyzes the situation on the routes between the UK and Spain, in particular between London and Madrid airports in the summer season 2009 the result may raise some doubts about the EC judgment. Namely, the parties operated the route from London airports to Madrid with altogether 15 daily frequencies, while all competitors (Easyjet, Air Europa and Ryanair) operated with 7 daily frequencies, (Case No COMP/M.5747, 2010). Based on daily frequency, the parties' market share is more than 60% and this result may indicate the market dominance on the route London-Madrid. In the EC report, the parties argued that the merger will not change the competitive structure on the route London-Madrid, which is true, having in mind that the effects of a merger are normally assessed on the basis of the pre-merger situation when they were already allowed to operate as an alliance with the dominant position. This raises another important question: is the competition concerns addressed by the EC only related to a problem caused by the merger and how to deal with the markets where the pre-merger structure was not competitive in the first place?

Finally, the case that has attracted much public attention, Aegean Airlines' acquisition of Olympic, raises some doubts about the EC decisions of approved or rejected mergers that are not based only on legal attributes, but also succumbed to the political and economic influence. In this particular case the problem is in the EC explanation of the approval, that otherwise Olympic would be forced to exit the market in the near future due to financial difficulties if it were not acquired by the Aegean. With this attitude the EC rejected the possibility that a new competitor might entry on the routes once the Olympic withdrew. Another important issue in this case is in the fact that on the domestic market Aegean and Olympic jointly control 90% of seats, which inevitably leads to monopoly (Economist, 2014).

#### 4. CONCLUSION

While it is still not easy to establish what has been the impact of air transport liberalization policies on economic growth and traffic in general, it is clear that mergers play important role in restructuring the transport market in line with demand for higher efficiency and effectiveness of the service providers. EU has a legitimate interest to secure the environment that offers customers goods and services at most favorable terms. The EC has extensive competences in this respect, so it is very important that criteria for allowing (conditionally or unconditionally) mergers are transparent and consistently applied. The EC's assessment of the relevant geographic and product market has to be persuasively justified, based on solid evidence and deep market impact analysis, while the proposed remedies must be in the service of the promotion of competition, and not unfair treatment for one of the sides involved.

It is evident that there are some restrictions which slow down the unavoidable process of consolidation. Although the deregulation and liberalization processes have advanced, the EU market is still characterized by a large number of national airlines and strong influence of the governments, which makes mergers more complicated, and the role of the EC still very sensitive.

#### ACKNOWLEDGEMENT

This research has been supported by the Ministry of Education, Science and Technological Development, Republic of Serbia, as a part of the project TR36033 (2011-2016) and the project 179076 (2011-2016).

#### REFERENCES

- Begović, B., & Pavić, V., (2010). *Šta je to konkurencija i kako se štiti?* Belgrade, Serbia: Center for Liberal-Democratic studies, 30.
- Economist (2014), *Aegean stable*. Retrieved from <http://www.economist.com/blogs/gulliver/2014/06/greek-aviation>
- Iatrou, K., & Oretti, M. (2007). *Airline Choices for the Future: from Alliances to Mergers*. Hampshire, England: Ashgate Publishing Limited.
- Kociubinski, J., *Consolidation or Fragmentation? European Competition Law in the EU Air Transport Sector: A Policy Analysis*, Polish Yearbook of International Law, XXIII, Polish Academy of Science (2013).
- Merger Procedure (2004). Case No COMP/M.3280 - Air France / KLM. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m3280\\_en.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m3280_en.pdf)
- Merger Procedure (2005). Case No COMP/M.3770 - Lufthansa/Swiss. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m3770\\_20050704\\_20212\\_en.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m3770_20050704_20212_en.pdf)
- Merger Procedure (2005). Case No COMP/M.3940 Lufthansa/Eurowings. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m3940\\_20051222\\_20212\\_de.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m3940_20051222_20212_de.pdf)
- Merger Procedure (2007). Case No COMP/M.4439 - Ryanair/Aer Lingus. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m4439\\_20070627\\_20610\\_en.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m4439_20070627_20610_en.pdf)
- Merger Procedure (2009). Case No COMP/M.5364-Iberia/Clickair/Vueling. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m5364\\_20090109\\_20212\\_en.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m5364_20090109_20212_en.pdf)
- Merger Procedure (2009). Case No COMP/M.5335 - Lufthansa/ SN Airholding. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/M5335\\_20090622\\_20600\\_229007\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/M5335_20090622_20600_229007_EN.pdf)
- Merger Procedure (2009). Case No COMP/M.5440-Lufthansa/ Austrian Airlines. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m5440\\_20090828\\_20600\\_en.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m5440_20090828_20600_en.pdf)
- Merger Procedure (2010). Case No COMP/M.5747-Iberia/British Airways. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/M5747\\_20100714\\_20310\\_802534\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/M5747_20100714_20310_802534_EN.pdf)
- Merger Procedure (2011). Case No COMP/M.5830-Olympic/Aegean Airlines. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m5830\\_7897\\_2.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m5830_7897_2.pdf)

Merger Procedure (2012). Case No COMP/M.6447-IAG/BMI. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m6447\\_20120330\\_20212\\_2452290\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6447_20120330_20212_2452290_EN.pdf)

Merger Procedure (2013). Case No COMP/M.6607–American Airlines/US Airways. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m6607\\_20130805\\_20212\\_3206867\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6607_20130805_20212_3206867_EN.pdf)

Merger Procedure (2013). Case No COMP/M.6663–Ryanair/Aer Lingus III. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m6663\\_9077\\_1.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6663_9077_1.pdf)

Merger Procedure (2013). Case No COMP/M.6796-Aegean/Olympic II. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m6796\\_20131009\\_20682\\_4044023\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m6796_20131009_20682_4044023_EN.pdf)

Merger Procedure (2014). Case No COMP/M. 7333–Alitalia/Etihad. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m7333\\_20141114\\_20212\\_4015913\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m7333_20141114_20212_4015913_EN.pdf)

Merger Procedure (2015). Case No COMP/M.7541–IAG/Aer Lingus. Retrieved from [http://ec.europa.eu/competition/mergers/cases/decisions/m7541\\_20150714\\_20212\\_4564413\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/m7541_20150714_20212_4564413_EN.pdf)

Cases:

ECJ, *United Brands v. Commission*, C 27/76 (1976)

CJEU, *Hoffman-La Roche v. Commission*, case 85/76 (1979)

## THE UPRISE OF THE MIDDLE EAST CARRIERS – EMIRATES' PATH TOWARDS SUCCESS

Jovana Kuljanin<sup>\*1</sup>, Milica Kalić<sup>1</sup>

<sup>1</sup>University of Belgrade – Faculty of Transport and Traffic Engineering

<sup>\*</sup> Corresponding author, e-mail: j.kuljanin@sf.bg.ac.rs

**Abstract:** Aviation sector plays a prominent role in the era of rising economy of the Middle East. In the last two decades, major oil-producing countries have established their own national carriers that brought significant changes and posed a burden of challenge to their competitors, especially those that operate long-haul traffic. The paper provides a brief overview of “state-of-the-art” literature on three “emerging airlines” such as Emirates, Qatar Airways and Etihad Airways which see tremendous expansion and permanently alter traffic flows across the globe. It also underlines the Emirates’ competitive advantage gained throughout implementation of hourglass network and efficient cost structure supported by the economic and social development of the Dubai Emirate.

**Keywords:** emerging carriers, Emirates, the Middle East, hourglass hub, cost structure

### 1. INTRODUCTION

The region of Middle East has historically been attractive as an inevitable point on trade routes between Europe and the Far East. The archaeological documentation reports that established trade routes connecting Europe to the Far East passed through the Arabian Peninsula even 3500 years ago. Despite political and ethical unrest combined with persistent tension between different nations over decades, this region remains the important “connector” that stands on the shortest path between the East and the West in modern times.

According to AEA (2006) the ‘Middle East’ includes 13 countries<sup>1</sup>, located in an area which stretches east of the Mediterranean, south to the Arabian Peninsula and north to the Caspian Sea covering a total land area of 5 million square kilometers. Within this region, the Gulf Cooperation Council (GCC) stands out as a separate sub-regional group encompassing major oil producing countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) which intend to create free cross-border investments and trade in services. The economic emergence of the region dated back to the period from 1965 to 1985 facilitated by dramatic rise in oil prices. Oil producing countries (especially large producers such as Saudi Arabia, Iran, Iraq, Kuwait) benefited directly in the form of high export earnings (Global Perspectives, 2000). In order to reduce their reliance upon oil production in the future, many countries diversify their economies and make significant effort to further develop sectors such as financing, tourism, light manufacturing and agriculture. Aviation is certainly seen as a contributor that can boost a bunch of services within tertiary sector such as tourism, hosting of international conferences and trade shows, opening luxurious corporate headquarters, etc. Therefore, the regional governments are strongly promoting the aviation sector, carrying out destination-marketing campaigns and ensuring the presence of the country at major international Travel and Transportation fairs (Vespermann et al., 2008).

In the last two decades, the role of the region has experienced tremendous transformation from the technical intermediate point for aircraft with limited range to the leading region in terms of trade and travel flows. Hooper et al. (2011) argue that this transformation represents a “principal axis shift” towards a fundamentally changed global aviation network built upon the economic and social development within the region. Arabian Gulf-based airlines, viz. Emirates, Etihad Airways and Qatar Airways, are among the fastest growing full service airlines in the world with their hubs located in Dubai, Abu Dhabi and Doha. These carriers are often called “emerging carriers”, the term used in the late 2000s to describe the group of carriers based in the Middle East that were growing rapidly (Al-Sayeh, 2014). Although this term has not been precisely defined, it often refers to carriers which have remarkable growth in annual number of passengers, capacity and fleet and operate long-haul flights from their respective hubs. Therefore, Emirates, Etihad Airways and Qatar Airways represent this group adequately.

---

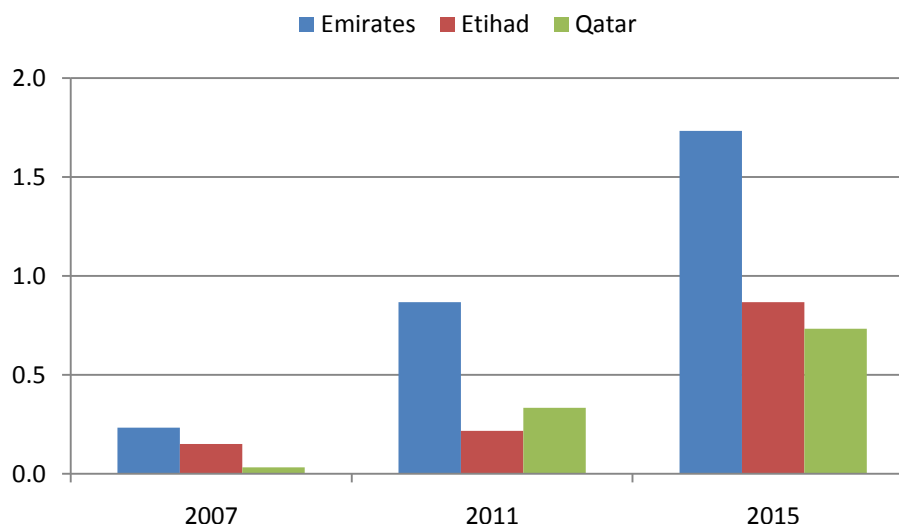
<sup>1</sup>Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates and Yemen



Emirates is certainly the largest carrier having aggressive expansion at phenomenal average annual pace of 12.4% in the number of passengers in the last five years (from 27.5 mil. in 2010 to 49.3 mil. in 2015). Unlike the other two carriers which cooperate closely with other carries through their membership in alliances, Emirates is still not that receptive to partnership. This carrier is considered as a “game changer” in airline industry as it brings conceptual changes and innovations in business model supported by Dubai’s rapid expansion. The purpose of this paper is to reveal the key competitive advantage of Emirates over its rivals, especially those of the similar size in Europe. Thus, this paper outlines the most important findings from the current “state-of-the-art” literature (the papers in relevant journals and publications) that investigate the rising activities of several “emerging” airlines in the Middle East. Section 2 provides the most important information about the three emerging carriers. Section 3 focuses on the business model of Emirates with its distinctive characteristics which assure competitive advantage and pose a challenge to other carriers on the market. This section analyses in details the cost structure as the most important advantage which contribute to Emirates’ favourable position on the market, by relying on the data provided in its annual reports. Finally, Section 4 concludes the paper.

## 2. OVERVIEW OF EMERGING CARRIERS’ DEVELOPMENT

Gulf Air is the ancestor of today’s most prosperous airlines in the Middle East: Emirates, Etihad Airways, Qatar Airways and Oman Air. The airline was founded in 1974 by the governments of Bahrain, Qatar, the UAE and Oman who purchased the company from the British Overseas Airways Corporation and later transformed it into Gulf Air. The newly formed carrier was the mutual national carrier of the four mentioned countries and had its base at Bahrain International Airport, mainly servicing flights to Europe and the Far East. In the early 1980s, Gulf Air rapidly enlarged its network, requiring new airplanes to be acquired. At that time, Gulf Air focused its operation primarily out of its hub in Bahrain, while the number of weekly flights to Dubai was reduced from 108 to 41 in mid-1983 (Hooper et al., 2011). Ambitious plan of Sheikh Mohammed bin Rashid Al Maktoum, the current ruler of Dubai and the Prime Minister of the UAE, was to “breathe new and modern life” into Dubai by developing an air transportation system as a backbone of economic activities. Thus, the state invested a modest sum of 10 million USD and leased two aircraft in order to launch its own airline – and Emirates was born in October 1985. At the beginning of its operation, the company had only a single route to Karachi. The growth of Emirates tremendously affected the growth of Dubai Airport that had merely 3 million passengers prior to and at the beginning of Emirates’ emergence. CAPA (2015a) reported that passenger numbers at Dubai had grown to 12.3 million by 2000, with over 1.2 million transit passengers shuttling via the rapidly growing hub. In 2014, Dubai airport counted over 70 million passengers, two thirds flying Emirates.



**Figure 1:**Emirates, Etihad and Qatar Airways seats into the US: 2007, 2011 and 2015 (in millions)

Shortly after foundation of Emirates, the neighbouring countries came up with ambitious plans to establish their own national carriers that reflected the status symbol of power and sovereignty. Oman and Qatar formed their own national carriers which allowed them to be less dependent upon Gulf Air services, although they continued to fund Gulf Air. In order to concentrate their effort solely on its own national carrier, Qatar decided to withdraw from Gulf Air in 2002, followed by Oman in 2007. Finally, in 2003 the UAE founded its own national career, Etihad Airways, and subsequently withdraw from Gulf Air. In such newly circumstances,

Bahrain remained the only country stakeholder in Gulf Air, which severely exacerbated its position on the highly competitive market. The expansion of these three airlines can be evidently observed by the increasing number of seats offered in 2007, 2011 and 2015, as depicted in Fig.1. On the other hand, Gulf Air currently offers flights within the Middle East and still provides flights to major European hubs as well as Bangkok. The short overview of the emerging carriers will be given in next sub-sections in reverse chronological order beginning with most recently founded airline, Etihad Airways and ending with the most successful one among them – Emirates.

## **2.1. Etihad Airways**

Etihad Airways is the national carrier of the Emirate of Abu Dhabi with its base at Abu Dhabi International Airport. This carrier has both narrow and wide-body Airbus and Boeing aircraft in the fleet servicing a rapidly expanding network within the Middle East and to Europe, Asia, North America, Canada and Australia (CAPA, 2016a). Beirut was the company's first destination to offer from its base in Abu Dhabi in November 2003, adding the new destinations almost every month. The order of 29 Boeing and Airbus aircraft shortly after its set-up represents the largest ever commercial airline start-up order. Passengers carried accounted for 4.6 million in 2007, continually recording rapid growth by an average rate of 18% in the following 8 years (2008 - 2015).

Etihad highly relies on codeshare agreement as a common tool that could significantly bolster passenger demand. Since its first codeshare with American Airlines in 2009, Etihad signed over 40 codeshare agreements with some of the worlds' largest airlines such as Air France, Air Canada and Turkish Airlines, placing itself in the first place by the number of ratified agreement. Moreover, after being rejected from global alliances, Etihad started establishing its own partnership platform by acquiring equity stake in other airlines. Until now, Etihad owns equity stakes in seven airlines that range from 3% in Air Berlin to 49% in former Jat Airways (now rebranded into Air Serbia). According to CAPA (2016a), Etihad Partners will have only about 2.6% of global ASKs compared to 18% to 24% each for the three big alliances, but it will serve half as many countries as the main alliances (almost 250 destinations in 80 countries). Unlike major alliances which mainly focus on revenue synergies, Etihad equity alliance tackles both revenue and cost structure side, describing "partnership" not as an alliance, but a "brand" (CAPA, 2014a). Thus, Etihad's goal is to achieve the quality of a membership which relies on standardizing the products across the various airlines.

The growth in passenger demand continued to surpass the airline's capacity increase which boosted the need for further fleet expansion (Arabian Business, 2016). In 2015, Etihad Airways' fleet was boosted by the deployment of the Boeing 787-9 Dreamliner, which entered commercial service on routes to Washington DC, Zurich, Singapore and Brisbane.

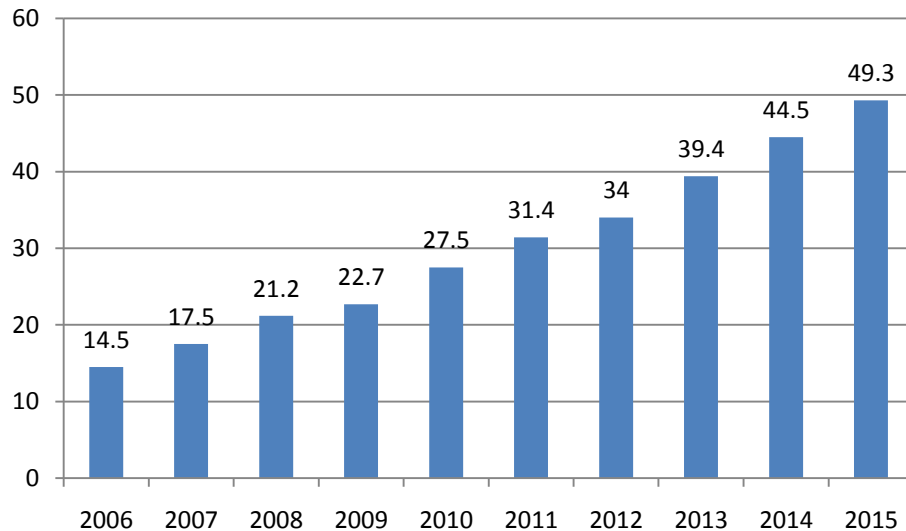
## **2.2. Qatar Airways**

Qatar Airways was established in 1993 offering its flights to destinations within the GCC and the Middle East. The aim of Qatari Royal family was to transform the airline with only three wide-body and one narrow body aircraft into a strong long-haul international airline. Therefore, the aggressive expansion plan was adopted which assumed acquisition of new aircraft types in order to expand the network. At the 2005 Paris Air Show, Qatar Airways placed an order for 60 Airbus and 20 Boeing 777s, with options for 20 more. Subsequent orders were placed in 2006 and again in 2007 for additional Boeing B777s and for eighty A350 aircraft valued at over 16 billion USD (Hooper, 2011). Main network carriers around the globe carefully observed such intensive fleet enlargements which could potentially jeopardize their position on specific markets. Meanwhile, Qatar Airways showed its willingness to join Oneworld alliance as Emirates kept on putting competitive pressure on many routes due to significantly greater seat capacity and network size. In October 2013, Qatar became a member of Oneworld hereby allowing its passengers greater number of destinations. After accession into the Oneworld, Doha Airport grew into the first alliance hub in the Arabian Gulf. The new airport in Doha was opened on April 2014 and was designed specifically to accommodate A380, since Qatar Airways may order additional units in the future (by 2020, the fleet will contain 10 aircraft type A380).

## **2.3. Emirates**

When Emirates was founded in 1985 by Sheikh Mohammed and his uncle Sheikh Ahmed, it had only two Boeing 727-200s and a start-up capital of 10 million USD as a gift from its founders. In the early period of its business, the company endeavored to build its network in the Middle East and the Indian Subcontinent. The first purchased aircraft was received in 1987 when Emirates started offering its flights to London Gatwick and Frankfurt. In the period from 1990s to 2000s, the airline was relatively unknown in the aviation world until

making the stunning 15 million USD wide-body aircraft order. Since then, the company gradually expanded its fleet by introducing only wide-body aircraft and recently became the largest customer and operator of the Airbus A380 and Boeing 777, with 44 and 121 aircraft respectively. For example, Emirates' fleet is larger than Singapore Airlines and Virgin Atlantic' fleets combined, and these airlines employ only wide-body fleet (Al-Sayeh, 2014). Concerning the configuration of its wide-body aircraft, Emirates placed into service its latest A380 two-class version seating with 615 seats, which means 18% more seats than its densest A380 configuration (519 seats) (CAPA, 2015b).



**Figure 2:** Emirates' number of passengers (2006-2015) (in millions)

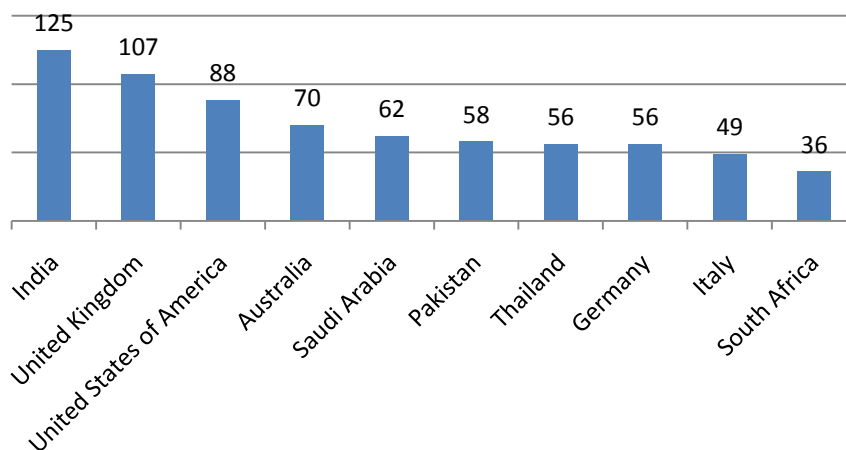
Nowadays, Emirates is one of the leading airlines in the world and is expected to surpass even the biggest players such as Delta, United and American, in terms fleet and passenger's growth by the end of 2020. Fig. 2 shows the evident growth in the number of passengers from 2006 to 2015 which almost quadrupled during this period. Emirates' partnership was relatively limited in scope and quantity (CAPA, 2016b) which was not characteristic of other large carriers as they extensively used the benefits of codeshare agreements to gain more passengers and decrease their costs. Emirates and Qantas ratified the agreement announced in 2012 which enabled Qantas to operate through Dubai hub as a connecting airport for Qantas' passengers on their way to Europe. Such cooperation would contribute to considerable advantages, such as revenue sharing and extensive codesharing from both parties on overlapping markets, as well as behind and beyond gateways. Since recently, Emirates is becoming more receptive to those partners with whom reasonable value could be additionally extracted. Thus, the partnership with TAAG in Angola is certainly the smallest, while that with Malaysia Airlines is the larger one.

### 3. AN OVERVIEW OF EMIRATES' KEY COMPETITIVE ADVANTAGE

As mentioned above, Emirates as well as other airlines from the Middle East, has been absolutely marginal in terms of competition for the large carriers from Europe, America and Asia for a long time. With its aggressive expansion in fleet supported by economic rise of the region in the last decade, especially the Emirate of Dubai, Emirates became a serious threat to long-haul carriers diverting a large portion of passengers to its flights via Dubai Airport. Dubai Airport, as well as other "emerging" carriers' hubs in the Middle East, has a very favorable position since 4.5 billion people reside within an 8-hour flight of the Middle East, providing the potential for a large part of the world's population to connect through a single stop (O'Connell, 2011). The proximity of Asia which is home to more than half of the planet's population emphasizes the potentials of the emerging carriers.

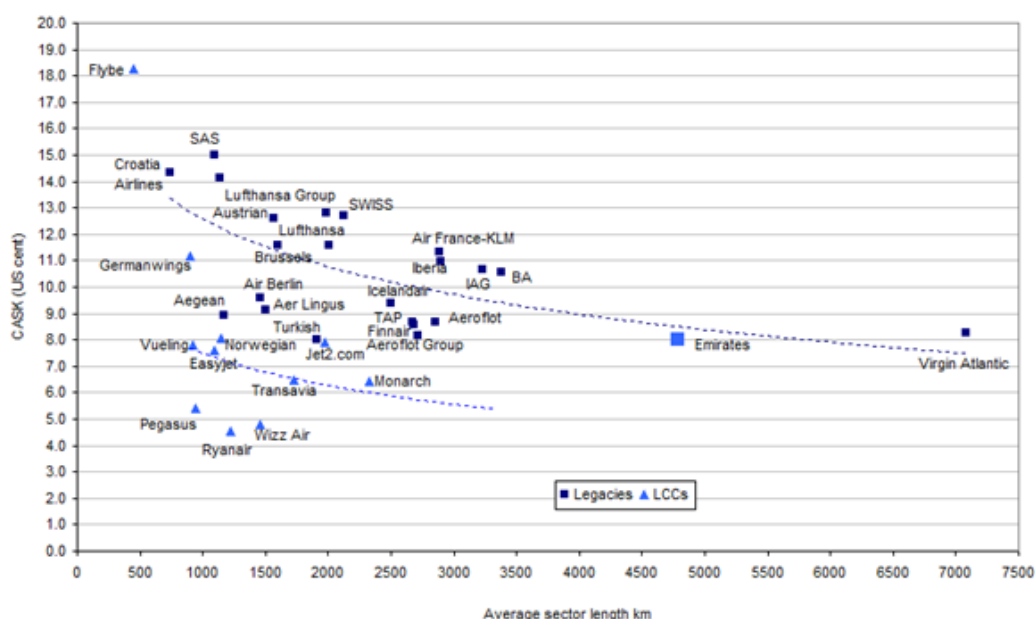
Unlike large European legacy carriers, which implies a hub-and-spoke network in which short/medium-haul flights and long-haul intercontinental flights feed each other through a hinterland hub, Emirates derives substantial cost savings by forming an hourglass hub in which long-haul intercontinental flights and long-haul intercontinental flight feed each other. For example, Air France-KLM report EUR 100 million losses due to Air France regional network in 2012 (CAPA, 2013a), while Lufthansa losses in short/medium haul non-hub network may account to EUR 200 million (CAPA, 2013b). Emirates focuses its business on "secondary-hub-secondary" strategy of connecting Europe's secondary airports with cities in Asia and Australia with only one transfer enabling them to enjoy a competitive advantage in travel time on a number of city pairs because

legacy carriers offer itineraries with two transfers; “secondary-hub-hub-secondary” (Grimme, 2011). Such a network structure provides benefits for passengers’ convenience by reducing the number of required connections – Glasgow-Dubai-Sydney with Emirates has one leg less than Glasgow-London-Singapore-Sydney with British Airways). Thus, Emirates offers its flights from secondary airports in Europe (Birmingham, Manchester, Newcastle, Nice, Venice, Düsseldorf and Hamburg) to Asia-Pacific region. From a theoretical point of view, Emirates designed the new concept of expanding its network by adding new “alternative” routes (“edges”) rather than by integrating additional airports (“nodes”) into the network. However, choosing hourglass network does not necessarily ensure shorter travel time between certain regions. Vispermann (2008) argues that Emirates, as well as other emerging carriers, have geographic advantage (and consequently, shorter travel time) in regard to South Asia and Oceania, while European carriers offer flights with shorter travel time to destination in North Asia. Emirates is also ideally positioned for India, the second most populous country, for its travel to North America, Europe and Africa (de Wit, 2014) which is not surprising having in mind that India is in the first place by the seat capacity offered in 2016 (Fig. 3).



**Figure 3:** Emirates' seat capacity by country (28-Dec-2015 to 3-Jan-2016) (in thousands)

Likewise in any other industry, keeping unit cost as lower as possible is essential in gaining competitive advantage since it allows airlines to be profitable at low fares. However, when comparing unit costs one must have in mind that they vary according to the average trip length. In general, the cost of producing a seat-kilometre (CASK) falls as average sector length increases since fixed costs are amortized over more seat-kms, while variable costs, such as fuel, are more efficiently consumed in longer flights (CAPA, 2014b).

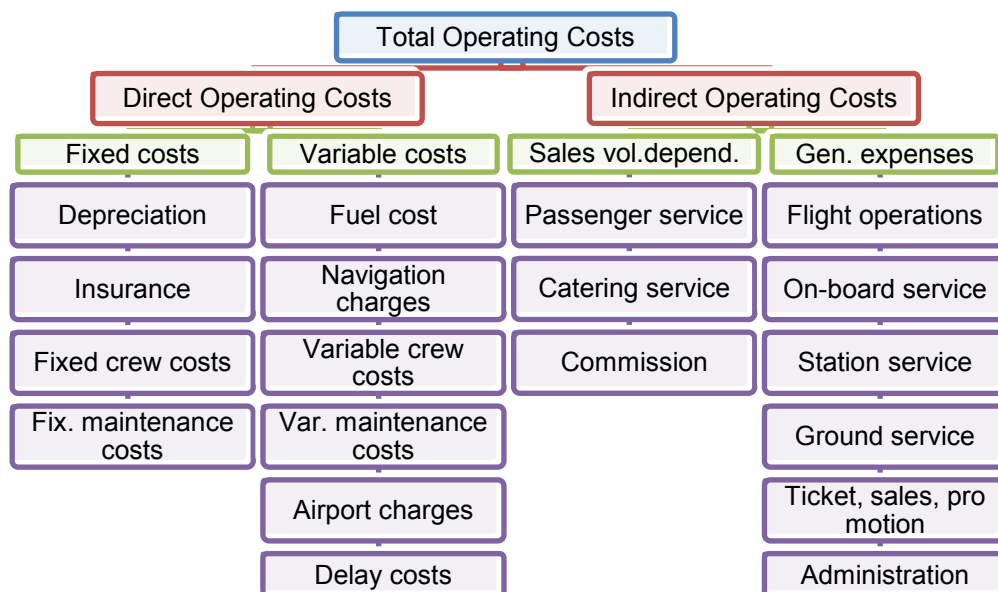


**Figure 4:** Cost per ASK, CASK, (UScent) and average trip length for selected European legacy and low-cost carriers and Emirates in 2012

Operating hourglass network enables reduction of costs per seat-kilometer as aircraft size increases and reduction of operational costs per kilometer as stage length increases. In other words, only the differences in network structure and design (hourglass hub vs hinterland hub) can lead to significant cost differences and competitive advantage to a carrier which operates hourglass network. As it can be observed from Fig. 4, Emirates' CASK is below major European carriers' trend line, as well as below Virgin Atlantic that also relies its operation on ultra long-haul traffic.

A great number of legacy carriers in Europe, supported by their governments, have complained against Emirates' expansion at respective airports. Therefore, many protectionist measures have been stipulated such as those by the German Federal Office for Goods Transport that forced Emirates to increase the price of its business-class fares by about 20% in 2009.

In order to understand Emirates' competitive advantage over its rivals, especially those in Europe and North America, it is crucial to look into airlines' cost structure (Fig. 5).



**Figure 5:** Airline operating costs

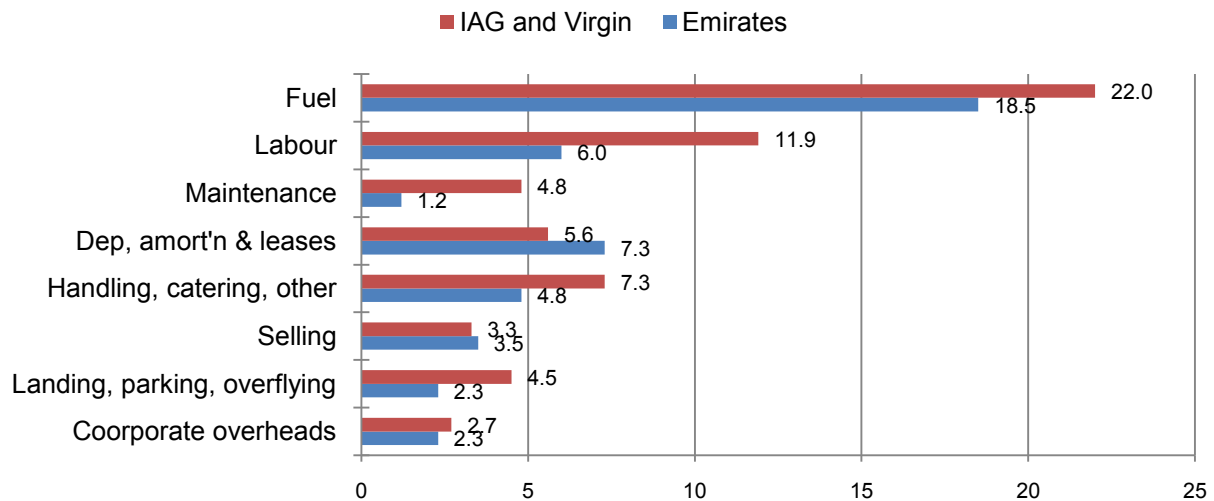
Direct operating costs are all those expenses associated with and dependent on the type of aircraft being operated, including all flight expenses (flight crew salaries, fuel, airport and navigation charges), all maintenance and overhaul costs, and all aircraft depreciation expenses. Indirect operating costs are all those costs that will remain unaffected by a change of aircraft type because they are not directly dependent on aircraft operations, including expenses that are passenger-related rather than aircraft-related (such as passenger service costs, costs of ticketing and sales, and station and ground costs), and general and administrative costs. (Wensveen, 2007).

In order to be consistent in unit cost comparison, the airlines' average trip length should be of the similar size. For this reason, in its analyses, CAPA (2014b) compares Emirates' unit costs by cost category with the average unit cost of IAG<sup>2</sup> and Virgin Atlantic, since the average trip length of the latter two approximates to the average trip length of the former.

The results presented in Fig. 6 show that Emirates has an advantage in almost every cost category (labor, fuel, maintenance, landing, parking, overflying, handling, catering, corporate overheads) except selling costs and aircraft ownership costs (depreciation, amortization and operating leases). It is evident that Emirates' gains the most significant savings in three cost categories – labor, fuel and maintenance.

Lower unit labor costs come from the practice of hiring workers from South and South East Asia entwined with Emirates' ban on unionization. Emirates' advantage in fuel cost per ATK comes from the greater fuel efficiency of its young fleet, which has more seats and fuel-efficient engines. The young fleet comprising modern aircraft further contributes to lower maintenance costs. Finally, the "landing, parking and overflying" charges are much lower in Dubai Airport from which a large portion of Emirates' flights have been operated.

<sup>2</sup>IAG – the holding company of Aer Lingus, British Airways, Iberia and Vueling



**Figure 6:** Cost per available tonne-kilometre (USc) by cost category for Emirates versus the average of IAG and Virgin Atlantic in 2012

Higher costs per ATK (available tonne-kilometres comprises both cargo and passengers) in aircraft ownership category result from huge investments in purchasing new aircraft and significant use of operating leases. In comparison to Lufthansa which has 622 aircraft, out of which a hefty share of 90% is owned (only 4% are on an operating lease and another 6% are on finance leases), Emirates has 205 aircraft, 7% of what are owned, 57% are on are on operating leases and another 36% are finance leased. However, these higher costs are further compensated by lower maintenance cost. The higher unit cost per ATK in “Commercial and selling costs” comes from extensive promotional expenditure such as sponsorship of big sport events as well as from the use of indirect distributional channels in catchment areas such as India and Africa.

#### 4. CONCLUSION

Located at the crossroads between Asia, Africa, and Europe, the region of the Middle East has traditionally been an inevitable point on the routes connecting these regions. The most prosperous countries of the Middle East (i.e. oil-producing) invested substantially in the aviation sector in the last two decades as a part of their intensions to diversify their respective economies in post-oil era. Shortly after their establishment, the “emerging” carriers (Emirates, Qatar Airways and Etihad Airlines) started to benefit from both geographical positions, cost structure which allows tremendous savings in many cost categories and additionally generated demand for air travel. Their favorable geographical position enables approximately 80% of the world population to travel within an eight-hour flight of the region. The “emerging” carriers have broadly exploited this advantage by aggregating traffic at their hubs and offering the shortest one-stop service between many distant city pairs in the East and the West. The long-haul hourglass network developed in this way completely derives the benefits which stem from technological economies of scale of a modern long-haul wide-body fleet.

The largest and most profitable among them, Emirates, is completely owned by the government of Dubai which enables it to operate in a tax free environment with no legacy cost. The successful growth that the airline recorded over the last two decades lies in several important facts such as: flat management model adopted (organizational structure with few or no levels of middle management between staff and executives), avoiding direct subsidies and embracing the competition forced onto it by Dubai’s liberal aviation policies. The paper emphasizes the importance of Emirates’ hourglass network via its Dubai hub which brings significant savings as the cost of producing a seat-kilometre (CASK) falls as average sector length increases. The results of unit cost across operating costs indicate that the airline gains significant savings in the cost categories such as labor, fuel and maintenance. On the other hand, selling costs and aircraft ownership costs are the only two categories where Emirates has higher unit costs compared to its competitors with similar characteristics. In this way, it can be concluded that the “emerging carriers” has permanently altered the current outlook of aviation industry and caused legacy carriers, especially those from Europe and the United States, to revise their business in order to sustain profitable growth in the future.

## REFERENCES

- Al-Sayeh, K. (2014). The Rise of the Emerging Middle East Carriers: Outlook and Implications for the Global Airline Industry. MSc thesis in Transportation at the Massachusetts Institute of Technology
- Arabian Business. (2016). Etihad Airways sees passenger numbers grow 17% in 2015. Retrieved from: <http://www.arabianbusiness.com/etihad-airways-sees-passenger-numbers-grow-17-in-2015-618309.html>
- Association of European Airlines (AEA). (2006). Blueprint Middle East. Market Research Quarterly, (3)
- CAPA – Centre for Aviation. (2013a). World Aviation Yearbook 2013, Europe. CAPA Centre for Aviation, Sydney, Australia.
- CAPA – Centre for Aviation. (2013b). Germanwings Rebrands: You Say You Want a Revolution? to Be Led by Cost and Operations. CAPA Centre for Aviation, Sydney, Australia. Retrieved from: <http://centreforaviation.com/analysis/germanwings-rebrands-you-say-you-want-a-revolution-to-be-led-by-cost-and-operations-104001>
- CAPA – Centre for Aviation. (2014a). "Etihad Airways Partners" Alliance accounts for 2.6% of global ASKs, 2.0% of seats. Retrieved from: <http://centreforaviation.com/analysis/etihad-airways-launches-partners-alliance-with-26-of-global-asks-20-of-seats-191467>
- CAPA – Centre for Aviation. (2014b). Unit cost analysis of Emirates, IAG & Virgin; about learning from a new model, not unpicking it. Retrieved from: <http://centreforaviation.com/analysis/unit-cost-analysis-of-emirates-iag--virgin-about-learning-from-a-new-model-not-unpicking-it-147262>
- CAPA – Centre for Aviation. (2015a). Emirates Airline turns 30: Just as it has changed the world, now Emirates faces its own changes. Retrieved from: <http://centreforaviation.com/analysis/emirates-airline-turns-30-just-as-it-has-changed-the-world-now-emirates-faces-its-own-changes-245140>
- CAPA – Centre for Aviation. (2015b). A380 fleet profile: Emirates prepares for 615 seat configuration. SIA will dispose of early models. Retrieved from: <http://centreforaviation.com/analysis/a380-fleet-profile-emirates-prepares-for-615-seat-configuration-sia-will-dispose-of-early-models-249033>
- CAPA – Centre for Aviation. (2016a). Etihad Airways. Retrieved from: <http://centreforaviation.com/profiles/airlines/etihad-airways-ey>
- CAPA – Centre for Aviation. (2016b). Emirates Airline: The strategy reshapes in 2016 – partnerships, China growth, smaller widebodies. Retrieved from: <http://centreforaviation.com/analysis/emirates-airline-the-strategy-reshapes-in-2016-partnerships-china-growth-smaller-widebodies-260221>
- De Wit, J. (2014). Unlevel playing field? Ah yes, you mean protectionism. *Journal of Air Transport Management* 41, 22-29. doi:10.1016/j.jairtraman.2013.11.012
- Global Perspectives. (2000). Retrieved from: <http://www.cotf.edu/earthinfo/meast/MEeco.html>
- Grimme, W. (2011). The growth of Arabian airlines from a German perspective – A study of the impacts of new air services to Asia. *Journal of Air Transport Management*, 17 (6), 333-338. doi:10.1016/j.jairtraman.2011.02.002
- Hooper, P., Walker, S., Moore, C., Al Zubaidi, Z. (2011). The development of the Gulf region's air transport networks – The first century. *Journal of Air Transport Management*, 17 (6), 325-332. doi:10.1016/j.jairtraman.2011.02.001
- O'Connell, J. F. (2011). The rise of the Arabian Gulf carriers: An insight into the business model of Emirates Airline. *Journal of Air Transport Management* 17 (6), 339-346. doi:10.1016/j.jairtraman.2011.02.003
- Vespermann, J., Wald, A., Gleich, R. (2008). Aviation growth in the Middle East – impacts on incumbent players and potential strategic reactions. *Journal of Transport Geography* 16 (6), 388-394. doi:10.1016/j.jtrangeo.2008.04.009
- Wensveen, J.G. (2007). *Air Transportation: A Management Perspective* (6th ed.) Hampshire, England: Ashgate