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THE IMPORTANCE OF SOCIAL NETWORKS – INTRODUCTION AND BASIC KNOWLEDGE OF SOCIAL MEDIA FOR SMALL AND MEDIUM SIZED COMPANIES

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ABSTRACT

For several years social media is becoming more and more popular and famous in the 21st century. Especially so-called social media networks are having huge relevance in the daily (online) business. But in nowadays many small and medium-sized enterprises (SME) are facing the missing practical and feasible solutions how to integrate and implement social media activities in their current communication structures. This is based on the fact that many German medium-sized companies are facing difficulties with the social media business. On the one hand this is based on the fact that there is no know-how about the possibilities of social media activities. On the other hand this is based on the fact that there are no resources and the big fear of wrong investments into tools concerning the Web 2.0.

I. INTRODUCTION

For many years, classical marketing tools have been used to support many companies and brands to build brand awareness and to strengthen sales activities. Known worldwide, the so-called Porter's 4 P's set the foundation for many marketing activities and strategies. But in the last years a new digital "communication tool" occurred and gained big power/ relevance: Social media networks. Social media usually refers to the term Web 2.0 and is used throughout daily business worldwide.

In general, social media connects brands, organizations, customers and potential partners effectively. And there is one bigger advantage: Social media mainly targets other customers through the shift from pontification to a two-way communication, rather than classical marketing. This means that consumers do not only trust in classical marketing or in classical messages and no longer believe in corporate messages. Rather, customers want their information from people / groups they know, they believe and trust in. These social media aspects count on the fact of building relationships which are more lasting and will result in higher sales, less returns and greater word-of-mouth impact. But this competitive advantage needs to be prepared and implemented in order to have this advantage.

One very important aspect of social media is the so-called social network. The most popular ones in German-speaking countries are Facebook, Xing and LinkedIn. Social network is defined as a website where people are connected with friends. With regards to small and medium sized companies social networking sites are hot topics for marketers since they present a number of opportunities for interacting with customers online.

Therefore, the given research paper provides a brief introduction of social media and the basic tools of social networks which small and medium sized enterprises might have to take into account. Due to the fact that social media cannot stand alone but needs to be considered within an integrated marketing strategy, the paper can be seen as a first guidance for companies and their marketing managers who are considering social media and especially social networks in the near future.

Since this research paper is in progress, it needs to be taken into account that there are more social media networks than mentioned in the given paper as well as the fact that not all tools might fit a company´s marketing - and overall presence - strategy.

II. APPROACHING THE TOPIC – WHAT IS SOCIAL MEDIA?

To understand the importance of social networks it is necessary to approach and define the basic knowledge of social media first in order to get an understanding of the topic. Therefore, a short insight into the main guidance and key factors of social media will be outlined. These keywords briefly cover the features of social media and provide the basis to analyze the relevance of social media.

Social networks are an important part and tool of social media. With regards to the research papers topic, social networks will also be discussed in the given paper. Due to the fact that the focus is set on small and medium sized enterprises, only the most important and known social networks will be introduced.

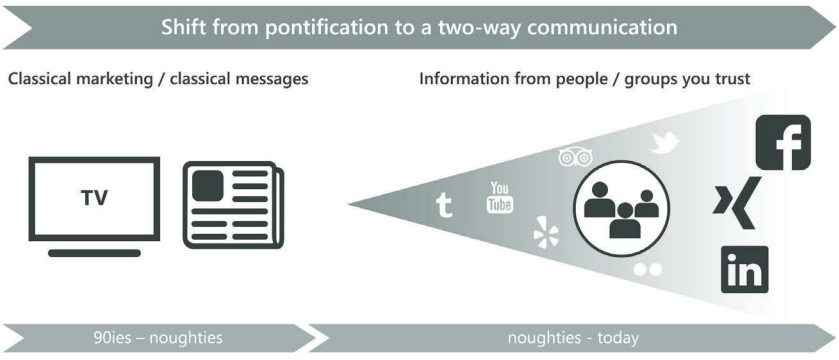
A. SOCIAL MEDIA

Following Safko (2012, p. 4), social media is defined as the media which is used to be social. This means that hundreds of technologies which are available for someone to connect with someone else are used. The terminology social media consits of two parts.

The first one, social, "refers to the instinctual needs we humans have to connect with other humans" (Safko 2012, p. 4). This behaviour goes back to the point when the species began. Human beings try to be in groups and around with other human beings of similar like-minded people. This is based on the fact that these people or groups are feeling the same and sharing their thoughts, ideas and experiences (Grabs and Bannour 2014, p. 25).

The second terminology, media, defines the connection of how human beings get connected. This connection can be any possible way to get connected, for instance by written words, audio, web, television, email etc.

Figure 1.: Shift from pontification to a two-way communication

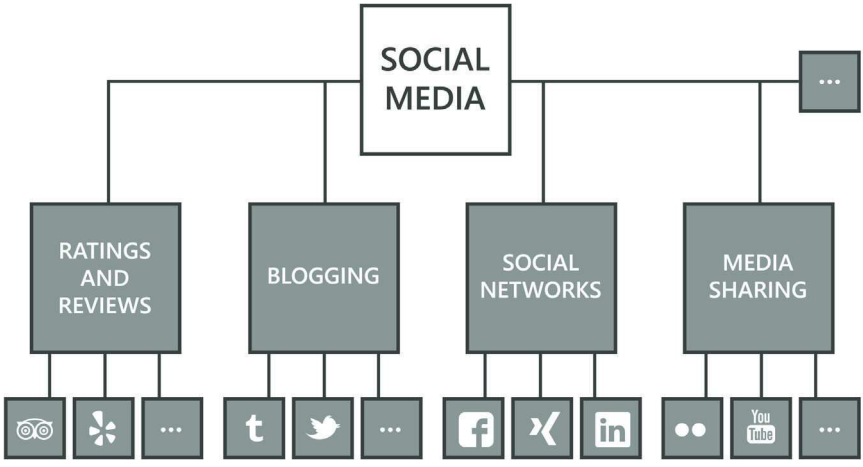


Source: Own illustration

Combining the two terminologies, Bernecker and Beilharz et al. (2012) define social media as the process of how all these technologies can effectively be used to reach out and connect with other humans. Safko (2012, p. 4) goes even one step further and states that human beings then create a relationship, build trust and eventually these relationships develop to the point that the people become customers and buy the offered product. In order to clearly define social media, Meyer (2012, p. 10) highlights that social media generally solves not the marketing woes of companies and creates instantly wealth for all involved parties. It is fundamental to question whether a company wants to do marketing and how much it is willing to spend. Social media is not seen as the solution for companies facing difficulties with current marketing activities. Following Safko, "social media is only a new set of tools, new technology that allows us to more efficiently connect and build relationships with our customers and prospects." (Safko 2012, p. 5)

Before defining the different categories and tools of social media, it is indispensable to question why social media should be used. Ever since the human beings began to interact, they pontificated. Nowadays, social media is seen as a two-way communication. Safko (2012, p. 5) defines the change as a shift from pontification to a two-way communication. This means the consumers do not trust classical marketing, classical messages as well as the fact they no longer believe in corporate messages. The customers rather want their information from people / groups they know, they believe and trust in (Heymann-Reder 2011, p. 22). With this shift there is a new way to communicate by listening first, following and understanding the conversation and only speak at the end (Hettler 2010, p. 26).

Figure 2.: Overview of Social Media tools



Source: Own illustration

Coming back to the introduction and definition part, social media is mainly used for marketing, sales, public relations, and communication tools to communicate with the customers. Furthermore, social media is defined as a set of highly effective tools for customer service, business-to-business (B2B), and internal communications (Safko 2012, p. 8). Kerpen defines social media as a must have in customer service since it is the perfect tool to stay connected with the customers after sale. On the other hand on the B2B side, social media has to be an integral part of the company's strategy as the majority of customer benefit from it in the B2B and the B2C business as well - if only certain information would stay password-protected online. The last parties are the internal customers such as the employees. Social media is a perfect tool to communicate with the employees and get connected with them easily (Kerpen 2015, p. 14).

Figure 2 gives a brief overview of the main corresponding social media tools: Rating and Reviews, Blogging, Social Networks and Media Sharing. In the given research paper the focus is set on social networks – with special regards to Facebook, Xing and LinkedIn.

B. SOCIAL NETWORKING

Social network is defined as a website where people are connected with friends. Every social network has its own possibilities and challenges (Barker et al. 2013, p. 179). Users have different expectations of commercial behavior and require certain opportunities. Besides, these networking sites are hot topics for marketers since they present a number of opportunities for interacting with customers. Moreover, these sites include the possibility of plug-in applications, groups, and fan pages (Zarella 2012, p.53). Safko (2012, p.24) goes one step further and defines social network as a group of people who interact through several media (newsletters, comments, e-mail, telephone etc.). These groups use audio, photographs and videos for social, professional, and educational purposes to build trust in a given community. Their level of interaction and participation differs among the members.

The history and roots go back to the beginning of the 1980s where the first users could log in to systems to share software and data as well as sending messages and post on public boards. Due to slow connections and high costs of long distance calls, these networks were mainly local communities. With the growth of the World Wide Web, the social network became more popular and the first social networking pages were set up (Weinberg 2014, p.199). Since 2009 the most popular and worldwide known one is the social network Facebook. Facebook was founded in 2003 and was supposed to be an exclusive network for the Harvard University in the US. Very slowly the site allowed other students to join the network, then

several years later pupils were allowed to join. Finally, in 2006 anyone was allowed to join as long as the user had an email address to sign up (Zarella 2012, p.57).

Once the user becomes a member of a social network, the lifecycle varies from user to user. The life cycle starts with initiating their life in a community as lurkers, visitors, or trolls. As soon as users become comfortable, they begin to participate in the community (Barker et al. 2013, p.184). Depending on the user and after a certain time of contribution, some members become regulars and some other break through to leaders. The time to become a so-called "elder" depends on the culture of the site (Safko 2012, p.25).

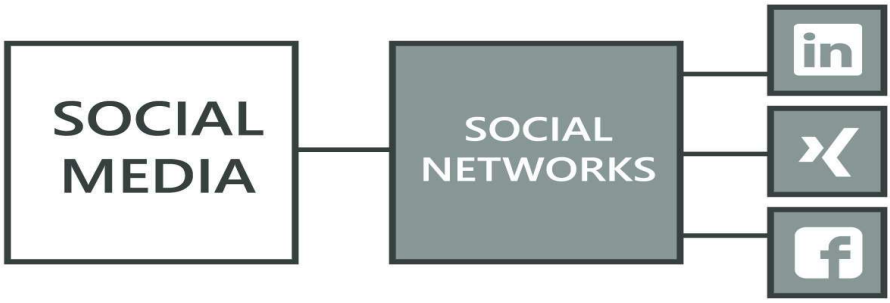
Depending on the feature sets and reasons to enter a social network, there are some common elements across most of the social networks (Hilker 2010, p.31). All social networks are built up with user pages, known as profiles. Every user can decide on her / his own which information (name, education, relationship status, contact information etc.) in his profile is shared with the community. E.g. Facebook can link to photos of the user, their friends and allows visitors to contact the user directly (Zarella 2012, p.57).

Against this background it is important to highlight, that social network profiles are for real people. Following Zarella (2012) a person should have a profile; a company's logo should not have one as profiles contain personal information. Brands cannot have a favorite movie or hobbies. But brands can stick to a page or group for the company's information (Barker et al. 2013, p.197).

Coming back to basic idea of social networks, the most important action of social networks is the act of two people connecting. Following Zarella (2012) social networks are conceived to emphasize strong connections between people. People - the user knows in real life. Depending on the user, the user accepts friend requests from people the user knows well, other user accepts friend requests from people they do not know well or they do not know at all. All social networks impose limits. There are restrictions on how many people you can connect in a given amount of time. This is based on the idea that these social networks are a building process (Zarella 2012, p.59).

Since social networks are not recommended for brands but for persons, it is to be questioning how companies can generate profit from these huge social networks.

Figure 3.: Overview of Social Networks



Source: Own illustration

Many social networks contain the concept of a group. Following Zarella (2012, p.63) a group is defined as a collection of people joined by some common interest. Within these groups the group members can share information and discussions, as well as sending (private) messages to each other. Starting and joining groups is simple and requires only little time and resources. The disadvantage which has to be faced is that there are many people who belong to tons of pointless groups. The exception of network is LinkedIn as this network displays the logo of the group on the user profile which is seen by all other users. This means that many users are becoming more selective with joining groups.

Another important point for companies are the category photos. This feature allows the user to share and link pictures. Simply upload the pictures and all users can be tagged easily in the photo with their (user) name. Also, this action allows commenting on pictures by other users which is seen by all connections/ friends in turn (Weinberg 2014, p.306). According to Zarella (2012, p.65) these features are very interesting for companies and/ or brands as campaigns can be designed to encourage users. The user takes pictures with the product (offered) and posts it on the social network, e.g. Facebook or My Space. Additionally, social networks allow creating events and inviting certain users. This can be in real life or online. In real life it is a good opportunity for companies to host a local event, invite the customers / fans and use the chance to get to know each other.

One of the stickiest issues is the privacy factor in the social networks. The younger the user, the less the user is concerned sharing information on his profile. Younger users do not revel sharing information and do not think about the contents which they share online. This might be embarrassing or problematic later

in life. Older users are more concerned about the privacy settings and sharing information online (Zarella 2012, p.66). There are several providers which enables everyone to create and set up an own network or MySpace-type page online (Safko 2012, p.36).

After defining the term social networks, a short insight and description into the most three popular social networks (German-speaking region) Facebook, LinkedIn and Xing (compare figure 3) will be given in the following subchapters to get a deeper insight.

i. Facebook

Since 2009 the most popular and worldwide known network is the social network Facebook. Facebook (www.facebook.com) started as an exclusive network for students of Harvard University in 2003 and has become the most dominant social networking site in the last years.

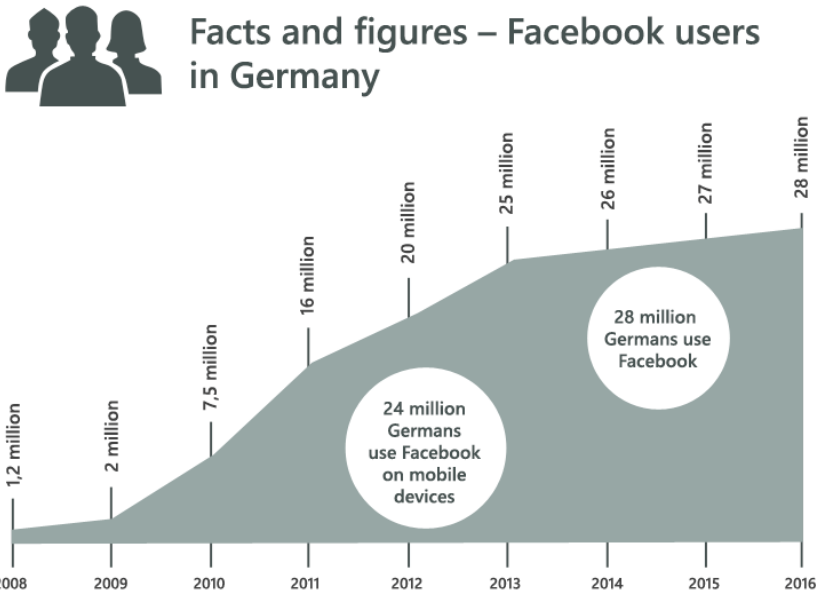
Compared to other social networks, Facebook has the most useful features for social media marketer. Facebook is seen as a funny playground and an easily to navigate place to get reconnected with old friends (Weinberg 2014, p. 167).

Besides, Facebook also offers privacy settings right after setting up the account. The user has the chance to divide his friends into lists, such as family, work, online buddies etc. and can control / specify therewith which features are seen by which groups (Palme 2012, p. 17). With regards to companies, Facebook allows businesses to create public profiles known as pages. Some of the features are the same as the user profiles. The pages are free of any charges and can have custom applications, photos, public messaging walls, and events (Calleen 2012, p. 58). Palme (2012, p. 84) emphasizes companies have to have a Facebook page if they are engaged in social media marketing since it can serve as a central place to integrate other marketing campaigns.

When setting up a page for business, it has to have a few applications to make the page more interesting to visitors. This also increases the likelihood of visitors to return again to the page. The best pages are set up by fans, not by companies (Zarella 2012, p. 67).

According to Wiese (2016) 28 million people are using Facebook in Germany whereof 21 million people use it every day (compare figure 4).

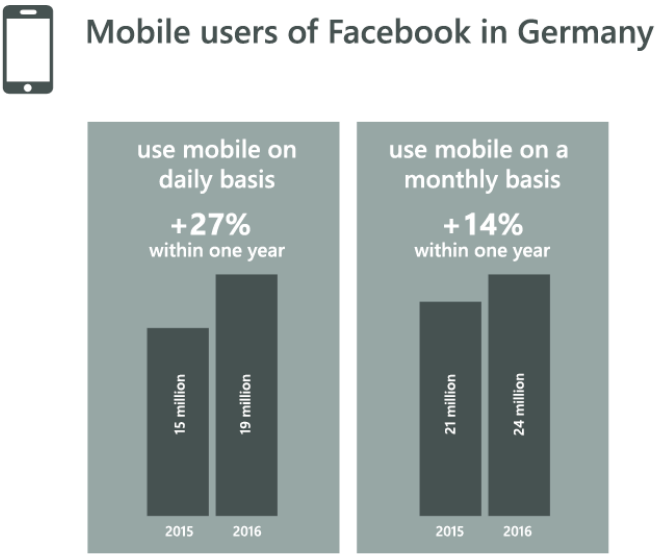
Figure 4.: Facts and figures – Facebook users in Germany



Source: Own illustration (according to Wiese, J.,2016)

Out of the 28 million, 24 million people use Facebook on mobile devices (compare figure 5). Out of the 24 million mobile users, 19 million users use it on a daily base, 21 million users on a monthly base. A 27% increase compared with the previous year for the daily mobile users and a 14% increase compared with the previous year for the monthly users.

Figure 5.: Facts and figures – Mobile use of Facebook in Germany



Source: Own illustration (according to Wiese, J., 2016)

ii. LinkedIn

LinkedIn (www.linkedin.com) is an American social network for professionals and not as much restrictive anymore regarding terms of customization and integration as it was a couple of years ago (Heymann-Reder 2011, p.192). At first sight, LinkedIn seems not to be interesting and relevant for marketers as a business platform for job seekers and recruiters. LinkedIn allows members to contact other members even though they are not directly connected. Additionally, LinkedIn charges a fee for special memberships and certain access.

The most useful feature for marketers is Groups and Answers (Jodeleit 2010, p.139). Especially nonpaying users can generate a profit of LinkedIn as they can easily post up to 10 questions a month that will be answered by the community. At this stage, the marketers can use an easy technique to establish through leadership and name recognition in specific fields. But the users prefer in-depth responses, not pitches for commercial products or services (Safko 2012, p.73). LinkedIn is changing in terms of advertising on the social networks but not much as the German social network Xing.

LinkedIn reached the volume of 8 million users/ members in spring 2016 in the DACH-region (German-speaking area of Germany, Austria and Switzerland). Worldwide, LinkedIn has more than 340 million users and is the biggest social

recruiting network. In the beginning of 2016 more than 3.5 million companies are using LinkedIn for B2B communication to reach their target groups (Kim 2015) worldwide.

iii. Xing

Xing (www.xing.de) is a German based online social network – specialized in recruiting. While LinkedIn focuses on an international level/ worldwide, Xing is mainly known in the DACH region. According to Xing, more than 10 million members are registered to network with their contacts and exchange information (Xing 2016). Xing allows not to contact other members if they are not directly connected - except the contact accepts to receive so or if the contacts have a premium profile. Xing charges a fee for special memberships (e.g. premium) and certain access.

Basically Xing offers profiles, discussion forums, groups and social community features. Especially for marketers, groups, company profiles and social community features are interesting. Within the last years, company profiles became more and more popular within Xing. Especially for marketers this feature is relevant as this tool can share, discuss and introduce information or products to the community. In general, a company page includes the logo, news and a description of the company – next to the job vacancies. Depending on the fee-based access/ membership, the company profiles are larger than free ones.

In comparison to Facebook, Xing connects business related contacts and enables the connection to possible businesses and orders more easily.

There are more than 8.2 million German Xing users and more than 1.5 million users from Austria and Switzerland. Every months Xing counts 29.68 million visitors. In spring 2016 Xing counts more than 208.000 company profiles (Xing 2016).

III. CONCLUSION

Social Media is a very complex topic. With regards to the changing environments and fast moving online Web 2.0 conditions, companies need to face social media activities increasingly.

One major part of social media are social networks. Social networks are growing increasingly and offer more and more possibilities for marketers to strengthen company- and brand awareness's.

Facebook belongs to the most important and relevant network marketers need to consider. With all its options, the potential to increase marketing activities and strengthen awareness, it is the number one social network in the DACH region and worldwide. Additionally, Xing and LinkedIn – formerly "only" known

as recruiting networks, offer additional commercial room for marketers in nowadays, too.

Considering social media marketing – with a special focus on social networks - there are certain benefits marketers have to put in the nutshell:

1. Increase exposure
2. Increase traffic
3. Develop loyal fans
4. Provide marketplace insight
5. Generate leads
6. Improve search rankings
7. Grow business partnerships
8. Establish thought leadership
9. Improve sales
10. Reduce marketing expenses (Kim 2015)

If social media and social networks are integrated well thought in a company's overall marketing strategy, companies can benefit a lot.

Within this research paper in progress only some of the basic tools were introduced. It needs to be taken into account that there a much more tools. Additionally, this research papers did not discuss the manpower needed to realize and implement a social media and social network approach.

It is highly recommended to face all corresponding influence factors in order to avoid a poor performance and/ or implementation. Basically social media and its implementation has to be treated carefully since not all tools and approaches are feasible for all small and medium sized companies.

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THE RELATIONSHIP BETWEEN EDUCATIONAL ATTAINMENT OF ECONOMISTS AND THE RISE OF EUROSCEPTICISM

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ABSTRACT

From the very beginning, the utmost and primary goal of the EU is a well-fare economy, driven by economic interests of all 28 Member States.In order to o guarantee prosperity, the EU needs strong educational background. Due to the fact, that the EU has only 85 Million educated people (out of 508 Million, i.e. less than 17%), the article focuses especially on distribution of tertiary education of economists (all levels : Bachelor, Master, PhD Doctoral) across the EU, as education of economists should on the one hand become basis for understanding of the EU policies, strategies and on the other hand a weapon for reducing the wide rise of Euroscepticism.

I. INTRODUCTION

Process of the European integration is progressing permanently and Euroscepticism as a criticism of or opposition to the EU has generally been analyzed by different studies and explained by several socio-economic, socio-cultural and political factors (see Hooghe and Marks 2005; Loveless and Rohrschneider 2008; Lubbers and Jaspers 2011; Hakhverdian A., van Elsas E., van der Brug W., Kuhn T. 2013).

In this research study the central question should be answered about the co-relationship between Euroscepticism and education and about the key drivers of the rising Euroscepticism? As traditionally found in literature, the main source of Euroscepticism has been the notion that integration and enlargement process within the EU weakens the national power of individual member states. But isn´t the source of Euroscepticism also a desire to slow, halt or reverse integration within the EU? Can Euroscepticism be perceived as an ethnic threat to people´s national identity both in cultural terms as well as with respect to national sovereignty among the least educated (see Netherlands, Lubbers and Jaspers, 2011)? Or is it a result of economic calculations, costs and benefits? Or is it the growing migration crisis that makes the Euroscepticism rise? Or is it the possibility of mobility because of open boarders that make some people being sceptic? Or is it media that shape positive/negative attitudes towards the EU?

More or less, all these issues and factors are directly or indirectly linked to education, but the aim of this study is to analyze the changing impact of education on Euroscepticism, as it is a well-established fact that the lower educated people are more sceptical of European integration than their higher educated counterparts.

A. Higher educational attainment level in the EU

The starting aim of the EU was a strong economy, operating as a single market in order to become one of the major world trading powers, able to compete in the globalized world. Strong economy and prosperity can be guaranteed solely by well-educated decision-makers and highly committed economists, who are capable of understanding the EU as unified federal state with its common strategies and policies. Therefore, the aim of this study was to analyze if there exists any correlation between education of economists and Euroscepticism. That is also the reason why this study focuses primarily on the education of economists

- taking into consideration figures exclusively for the year 2013 and
- examining the 10-year-period from 2004-2014.

This chapter highlights the education level of societies of European Union in figures and outlines its dynamics. Table 1 presents shares of population of Euro-

pean Union (28 countries) aged from 15 to 64 years by overall educational attainment level. In the period of 2002-2014 one could observe a relative stable percentage of upper secondary and post-secondary education (levels 3 and 4). Decreasing share of low educated population should also be noted (levels 0-2). On the other hand, there emerge growing trend of increasing number of highly educated people (tertiary education – levels 5-8), which is also the explicit purpose of this study. See table 1.

Table 1.: European Union (28 countries – EU28) - Percentage of population by educational attainment level (age from 15 to 64 years)

Time	Less than primary, primary and lower secondary education (levels 0-2)	Upper secondary and post-secondary non-tertiary education (levels 3 and 4)	Upper secondary, post-secondary non-tertiary and tertiary education (levels 3-8)	Tertiary education (levels 5-8)
2002	37,0	45,6	63,0	17,4
2003	35,9	46,0	64,1	18,1
2004	34,9	46,0	65,1	19,1
2005	34,1	46,3	65,9	19,6
2006	33,5	46,4	66,5	20,0
2007	32,9	46,6	67,1	20,5
2008	32,2	46,6	67,8	21,2
2009	31,5	46,5	68,5	22,0
2010	30,8	46,5	69,2	22,8
2011	29,7	46,6	70,3	23,7
2012	28,8	46,6	71,2	24,6
2013	27,9	46,7	72,1	25,4
2014	27,5	46,6	72,5	26,0

Source: http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Additionally, table 2 provides information related to the number of people (separately for males and females) in the EU that possess higher education. The number of females that attained tertiary education levels exceeds in the EU respective measure for males, particularly over recent years.

Table 2.: European Union (28 countries – EU28) - Tertiary education (levels 5-8): Population in 1000 (age from 15 to 64 years)

Time	Females	Males	Total
2004	30253,8	30498,4	60752,2
2007	34577,8	32913,3	67491,0
2008	36350,9	33788,4	70139,3
2009	38112,5	34813,0	72925,5
2010	39294,8	35775,1	75070,0
2011	40785,2	36678,6	77463,9
2012	42505,6	37708,6	80214,2
2013	44015,2	38595,3	82610,5
2014	45077,9	39806,5	84884,3

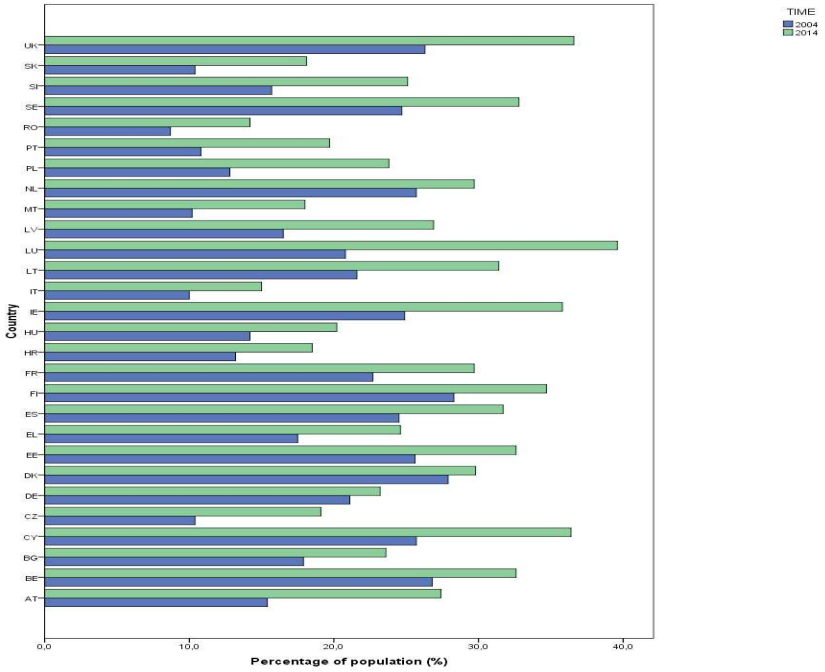
Source: http://ec.europa.eu/eurostat/web/education-and-training/data/database.

B. Higher education (all fields of study) in individual EU countries

Educational attainment levels of the population have improved significantly in individual EU countries over the period of 2004-2014 (Figure 1). However, the shares of highly educated people differ in EU countries significantly. On one hand, there are countries with respectable percentage of tertiary level educated society (for example: Luxembourg, UK, Cyprus, Ireland) and on the contrary share of highly educated persons is relatively low (for example: Italy, Romania, Slovakia).

Number of people that attained tertiary education level vary significantly across EU and this is due to the fact that population of EU countries is differentiated. The measures are at their highest in United Kingdom, Germany, France, Spain, Poland and Italy (Table 3). Contrarily, the lowest number of highly educated people has been reported in Slovakia, Lithuania, Croatia, Slovenia, Latvia, Estonia, Cyprus, Luxembourg, and Malta. Generally, the number of highly educated females exceeds that indicator for males. However, that is not the case in Germany.

Figure 1.: Percentage of population with higher education in European Union countries in 2004 and 2014



Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database. Countries symbols in table 3.*

Table 3. : Population (in 1000 persons) with higher education in European Union countries in 2014 (age from 15 to 64 years)

Symbol	Country	Sex		Total
		Females	Males	
AT	Austria	761,7	793,2	1554,8
BE	Belgium	1289,7	1081,9	2371,6
BG	Bulgaria	689,0	443,4	1132,4
CY	Cyprus	120,9	87,3	208,2
CZ	Czech Republic	703,8	649,5	1353,3
DE	Germany	5390,0	6842,0	12232,0
DK	Denmark	594,3	459,2	1053,5
EE	Estonia	178,5	102,8	281,3
EL	Greece	897,9	835,4	1733,3
ES	Spain	5080,9	4520,2	9601,1
FI	Finland	694,3	509,1	1203,5
FR	France	6638,5	5502,8	12141,3

Symbol	Country	Sex		Total
		Females	Males	
HR	Croatia	289,0	233,7	522,7
HU	Hungary	770,7	562,9	1333,5
IE	Ireland	577,8	465,5	1043,3
IT	Italy	3326,0	2531,1	5857,1
LT	Lithuania	373,4	242,8	616,1
LU	Luxembourg	67,5	74,9	142,4
LV	Latvia	227,4	120,4	347,9
MT	Malta	26,0	25,3	51,3
NL	Netherlands	1618,0	1607,9	3225,9
PL	Poland	3557,9	2458,3	6016,2
PT	Portugal	832,2	505,5	1337,7
RO	Romania	993,4	922,2	1915,6
SE	Sweden	1157,3	854,8	2012,1
SI	Slovenia	203,7	146,9	350,6
SK	Slovakia	389,0	308,5	697,5
UK	United Kingdom	7629,1	6918,9	14548,0

Source: http://ec.europa.eu/eurostat/web/education-and-training/data/database.

In 2013 in the EU-28, 1,920 million graduates (i.e. 4 %) of tertiary education levels attained Bachelor's or equivalent degree(tab. 4). Graduates with Master's or equivalent degree amounted up to 1,412 million (4%). Lowest number of highly educated graduates posed those with Doctoral or equivalent degree (0,122 million).

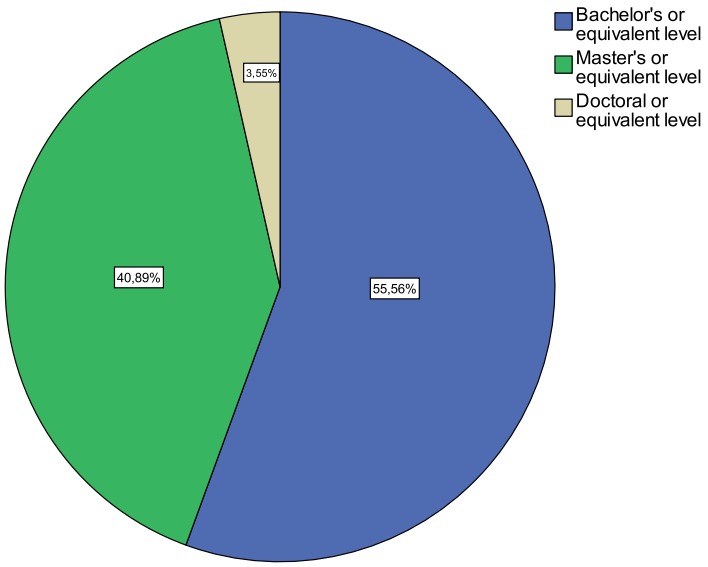
Table 4.: European Union (28 countries – EU28) - Graduates by education level in 2013

Tertiary education levels	Number of people
Bachelor's or equivalent level	1920036
Master's or equivalent level	1412902
Doctoral or equivalent level	122633

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Figure 2 presents these findings related to the amount of highly educated graduates in 2013 in very relative terms. The pie chart shows that people with Bachelor degree posed 55,6% of total graduates. Explicitly lower percentage (40,9%) amounted share of Master graduates. The specificity of doctoral tuition resulted in its lowest contribution (3,6%) to the overall number of graduates with higher education.

Figure 2.: European Union (28 countries – EU28) – Structure of graduates of tertiary education level in 2013



Source:http://ec.europa.eu/eurostat/web/education-and training/data/database.

C. Economic professions among students enrolled in tertiary education in the EU countries in 2013

Additionally, the study aimed at assessing the extent of economic education in European Union. The output is split by tertiary education levels according to ISCED11 (Table 4):

Table 4.: ISCED11 - ED5-8 Tertiary education (levels 5-8)

Code	Description
ED5	Short-cycle tertiary education
ED6	Bachelor's or equivalent level
ED7	Master's or equivalent level
ED8	Doctoral or equivalent level

Source: http://ec.europa.eu/eurostat/statistics-

Table 5 presents number of graduates in economic professions in EU countries in 2013. From this table could be seen that regardless of the education level the most popular field of economic studies are Business& Administration followed by Management& Administration.

Table 5.: Economic professions in EU countries – students enrolled in 2013

ISCED11	FIELD	Sex		Total
		Females	Males	
Short-cycle tertiary education	Economics	0	0	0
	Business and administration	12172	8131	20303
	Business and administration (broad programmes)	11275	6837	18112
	Wholesale and retail sales	30	31	61
	Marketing and advertising	164	147	311
	Finance, banking, insurance	71	134	205
	Accounting and taxation	0	0	0
	Management and administration	632	983	1615
	Secretarial and office work	0	0	0
Bachelor's or equivalent level	Economics	2572	3015	5586
	Business and administration	16684	15059	31743
	Business and administration (broad programmes)	7778	8481	16259
	Wholesale and retail sales	0	0	0
	Marketing and advertising	695	324	1019
	Finance, banking, insurance	119	164	283
	Accounting and taxation	389	259	649
	Management and administration	7703	5831	13534
	Secretarial and office work	0	0	0
Master's or equivalent level	Economics	1242	1398	2639
	Business and administration	7548	8307	15855

ISCED11	FIELD	Sex		Total
		Females	Males	
	Business and administration (broad programmes)	1443	1633	3076
	Wholesale and retail sales	39	135	174
	Marketing and advertising	582	277	859
	Finance, banking, insurance	205	383	588
	Accounting and taxation	286	316	602
	Management and administration	4992	5563	10556
	Secretarial and office work	0	0	0
Doctoral or equivalent level	Economics	183	315	498
	Business and administration	673	1024	1697
	Business and administration (broad programmes)	116	158	274
	Wholesale and retail sales	0	0	0
	Marketing and advertising	0	0	0
	Finance, banking, insurance	0	0	0
	Accounting and taxation	10	14	24
	Management and administration	548	852	1400
	Secretarial and office work	0	0	0

Source: http://ec.europa.eu/eurostat/web/education-and-training/data/database.

D. Correlation between attained tertiary education on economic studies and Euroscepticism

The numbers of economists, attaining higher education in the year 2013, is as follows:

- 69.073 Europeans (males 33.133, females 35.940) have attained Bachelor economic education , i.e. 3,6% out of 1,9 Million (all fields of study) - see table 6

- 34.349 Europeans (males 16.012, females 16.337) have attained Master economic education, i.e. 2,4 % out of 1,4 Million (all fields of study) – see table 7
- 3.893 Europeans (males 2.363, females 1.539) have attained PhD doctoral economic education , i.e. 3,2% out of 122.633 (all fields of study) – see table 8

If we take the representative figures of the year 2013, we can project/assume for the 10-year-period (2004-2014), how many Europeans attained economic education:

Table 6:: Economists attained Bachelor degree education

Bachelor/equivalent degree	2013	Period 2004-2014
economists	69.073	approx.. 690.073

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

The figure 690.073 means that out of 48 Million Europeans (all fields of study), there are only 1,4% economists.

And it means also, out of 85 Million of all highly educated people, there are only 0,8% of economists attaining Bachelor degree .

And that means also, out of the whole EU population (508 Million people), only 0,13% Europeans have attained Bachelor economic education (i.e. not even 1% of the whole EU population is reached).

Table 6a.: Distribution of graduates according to economic professions in EU countries – % of graduates of tertiary education in 2013 - Bachelor's or equivalent level

Country	Economics	Business and administration	Business and administration (broad programmes)	Wholesale and retail sales	Marketing and advertising	Finance, banking, insurance	Accounting and taxation	Management and administration	Secretarial and office work
Austria	2,3	19,5	7,5	,0	1,0	,2	,6	10,1	,0
Belgium	1,0	15,1	7,9	1,0	1,8	,2	,6	1,9	1,8
Bulgaria	13,1	28,8	,2	1,1	4,4	5,1	3,9	14,1	,0
Cyprus	2,9	26,5	7,1	,0	1,5	1,9	5,5	10,5	,0
Czech Republic	2,0	25,1	5,4	,1	,2	1,7	1,0	16,0	,6
Germany	,7	24,6	18,3	,7	,3	,3	,6	4,2	,2
Denmark	,9	17,1	,0	,9	4,3	4,9	2,1	1,7	3,3
Estonia	1,7	19,9	1,1	,7	1,5	,0	4,2	11,8	,6
Greece	4,4	15,7	,2	,2	1,4	,2	5,6	8,0	,0
Spain	,8	15,4	,0	,0	,7	,2	,0	14,2	,0

Country	Economics	Business and administration	Business and administration (broad programmes)	Wholesale and retail sales	Marketing and advertising	Finance, banking, insurance	Accounting and taxation	Management and administration	Secretarial and office work
Finland		17,5	17,5						
France		19,5	3,9	1,1	,9	1,2	1,9	10,4	,0
Croatia		31,2							
Hungary	1,4	30,8	,0	2,4	,5	3,5	,1	24,3	,0
Ireland	,6	19,5	8,9	,3	1,2	,7	2,8	5,5	,1
Italy	3,0	13,5	13,5	,0	,0	,0	,0	,0	,0
Lithuania	6,5	27,0	,8	,5	1,6	2,1	2,3	19,7	,0
Luxembourg	9,2	24,5	,0	,0	,0	,0	,0	24,5	,0
Latvia	,0	24,8	,0	,2	2,0	2,3	1,1	19,1	,1
Malta	,9	17,8	,0	,0	2,7	5,7	4,5	4,8	,0
Netherlands	,8	20,3	5,1	3,7	,5	,3	1,3	9,5	,0
Poland	2,8	25,5	10,7	,3	,0	1,0	2,5	11,1	,0
Portugal	2,5	16,1	,0	,2	2,6	,7	2,4	9,2	,4
Romania	7,4	20,3	,7	,3	2,3	4,7	4,7	7,5	,0
Sweden	1,8	11,0	10,1	,0	,0	,0	,0	,9	,0
Slovenia	7,8	21,1	15,5	,0	,6	,0	,1	4,8	,0
Slovakia	,8	16,8	,0	,2	1,6	1,4	,6	12,8	,0
United Kingdom		13,3							

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Table 7.: economists with master study education

Master/equivalent degree	2013	Period 2004-2014
economists	34.349	approx. 340.349

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Out of all 34 Million tertiary educated people with master degree study (within all fields of study), there is only 1% of Master economists.

Distributing this figure through 28 EU-countries, it makes about 122.155 economists with Master degree per country.

Out of 85 Million tertiary educated Europeans, there are only 0,4% of economists with Master degree.

And out of the whole 508-Million-EU-population there are only 0,06% of economists with Master degree within the whole EU within the 10-year-period (2004-2014).

Table 7a.: Distribution of graduates according to economic professions in EU countries – % of graduates of tertiary education in 2013 - Master's or equivalent level

Country	Economics	Business and administration	Business and administration (broad programmes)	Wholesale and retail sales	Marketing and advertising	Finance, banking, insurance	Accounting and taxation	Management and administration	Secretarial and office work
Austria	2,2	22,8	2,7	,2	1,0	,7	,8	17,6	,0
Belgium	1,4	15,8	7,3	,0	1,0	,4	,3	6,2	,0
Bulgaria	6,9	38,0	,2	1,1	3,2	11,9	8,6	13,1	,0
Cyprus	,2	49,3	16,9	1,0	,0	6,5	,0	25,0	,0
Czech Republic	2,4	22,9	6,3	,3	,8	,8	,4	14,3	,0
Germany	,8	13,2	12,1	,0	,0	,0	,0	1,1	,0
Denmark	3,4	19,2	,0	,5	1,0	11,8	2,4	3,5	,0
Estonia	1,5	14,7	,9	,0	,6	1,1	,3	11,9	,0
Greece	4,4	19,1	4,1	,3	,9	1,2	3,0	9,6	,0
Spain	2,5	14,8	,0	,0	2,2	,6	,3	11,6	,0
Finland		13,9	13,9						
France		23,5	8,8	,4	,9	1,5	1,3	10,6	,0
Croatia		11,7							
Hungary	3,6	17,7	,0	,0	2,2	2,2	1,2	12,1	,0
Ireland	1,1	21,6	1,9	,5	2,8	2,3	2,9	11,2	,0
Italy	2,0	11,2	10,1	,0	,0	,4	,0	,7	,0
Lithuania	5,7	23,8	2,0	,8	1,4	2,3	,6	16,3	,1
Luxembourg	,0	30,9	,0	,0	,0	12,1	15,8	3,0	,0
Latvia	,0	25,2	,0	,0	1,6	2,8	1,8	19,1	,0
Malta	,0	8,4	,5	,0	1,3	1,3	,0	5,3	,0
Netherlands	2,4	20,8	2,6	,1	1,3	1,6	2,7	12,4	,0
Poland	4,4	25,8	,0	,5	,1	1,5	5,2	18,4	,0
Portugal	2,2	14,8	,0	,2	2,4	2,2	1,6	7,9	,0
Romania	7,1	19,4	,7	,3	2,2	4,5	4,6	7,1	,0
Sweden	1,9	13,0	11,9	,0	,0	,0	,0	1,1	,0
Slovenia	1,4	11,8	5,7	,0	,3	,4	,5	4,8	,0
Slovakia	,4	17,5	,0	,6	1,3	2,1	,7	12,9	,0
United Kingdom		24,2							

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Table 8.: economists with PhD education

PhD/doctorate level	2013	Period 2004-2014
economists	3.893	approx. 38.930

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Out of 3 Million (3,6%) PhD-educated Europeans (all fields of study), only 1,3% attained the economic education within the 10-year-period.

Out of 508-Million of EU population this figure means only 0,07% PhD economists in 28 Member States in 10 years, that means only 1.390 PhD economists per each EU-country.

Table 8a.: Distribution of graduates according to economic professions in EU countries – % of graduates of tertiary education in 2013 - Doctoral or equivalent level

Country	Economics	Business and administration	Business and administration (broad programmes)	Wholesale and retail sales	Marketing and advertising	Finance, banking, insurance	Accounting and taxation	Management and administration	Secretarial and office work
Austria	1,6	4,7	,7	,0	,0	,0	,0	3,9	,0
Belgium	,9	4,5	4,5	,0	,0	,0	,0	,1	,0
Bulgaria	4,6	7,9	,6	,0	,2	,7	1,1	5,3	,0
Cyprus	1,9	3,8	,0	,0	,0	,0	,0	3,8	,0
Czech Republic	1,7	7,2	1,5	,0	,0	,6	,4	4,7	,0
Germany	1,0	4,7	4,4	,0	,0	,0	,0	,2	,0
Denmark	,0	,0	,0	,0	,0	,0	,0	,0	,0
Estonia	3,9	2,6	,0	,0	,0	,0	,0	2,6	,0
Greece	1,9	3,3	,1	,0	,1	,0	,1	3,0	,0
Spain		2,5							
Finland		5,3	5,3						
France		2,7	2,7	,0	,0	,0	,0	,0	,0
Croatia		2,5							
Hungary	3,0	,0	,0	,0	,0	,0	,0	,0	,0
Ireland	1,8	6,0	2,5	,0	,1	,1	,0	,7	,0
Italy		2,5							
Lithuania	7,7	4,8	,0	,0	,0	,0	,0	4,8	,0
Luxembourg	4,7	1,6	,0	,0	,0	1,6	,0	,0	,0
Latvia	,0	6,3	,0	,0	,0	,0	,0	6,3	,0
Malta	,0	,0	,0	,0	,0	,0	,0	,0	,0
Portugal	1,4	4,3	,0	,0	,1	,2	,3	3,7	,0
Romania	4,0	10,9	,4	,2	1,3	2,5	2,4	4,1	,0

Country	Economics	Business and administration	Business and administration (broad programmes)	Wholesale and retail sales	Marketing and advertising	Finance, banking, insurance	Accounting and taxation	Management and administration	Secretarial and office work
Sweden	1,9	2,5	2,5	,0	,0	,0	,0	,0	,0
Slovenia	4,0	15,5	5,2	,0	,0	,0	,0	10,1	,0
Slovakia	,9	10,5	,0	,0	,1	1,9	,1	8,4	,0
United Kingdom		4,2							

Source:http://ec.europa.eu/eurostat/web/education-and-training/data/database.

Nevertheless, as education is becoming an increasingly important factor in structuring certain political attitudes (e.g. van de Werfhorst and De Graaf 2004; Stubager 2008, 2010), this study shows that education is a stratifying factor also with respect to all EU-related issues.

II. CONCLUSION

Why is the Euroscepticism rising in Europe? Besides other already named factors, it is a well-established fact that people with low or medium level of educational attainment are far more sceptical of European integration project than their higher educated counterparts. Results of the most empirical research (see e.g. Hakhverdian, van Elsas , van der Brug, Kuhn, 2013) show that in all member states of the EU the relationship between education and Euroscepticism is as expected: more highly educated respondents are less Eurosceptic than the less educated, i.e. the relationship between education and Euroscepticism is a negative one.

In recent years and especially nowadays, Eurosceptic movements across the EU have been significantly growing and we are facing the fact that the populist parties as a polarizing and splitting tool of society mobilize large groups of mostly lower educated young people and voters.

Education, often understood as a means of overcoming handicaps, achieving greater equality, and acquiring wealth and status for all, is the process of socializing, of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits deemed necessary in our European society. Therefore it should become one of primary and compulsory tasks in order to minimize the rise of Euroscepticism, as it plays an increasingly important role in structuring attitudes towards the European integration.

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DISABILITY AND THE UNIVERSITY EDUCATION IN AUSTRIA

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ABSTRACT

In the academic year 2003/04 206,229 students were registered in Austria. Twelve years later, in the academic year 2014/15, as many as 375,900 students took part on different study programs of the Austrian Universities. This is an increase of 45.14%. In this period the number of people with different disabilities in Austria was approximately 1, 7 million and the number of registered disabled people was between 77,812 and 94,910. 9% of all disabled persons in Austria have reached the level of general qualification for university or even a university degree. At the same time the number of non-disabled on this level of education was 27%. Despite many attempts to raise the level of education, the majority of disabled people complete only compulsory level or apprenticeship education. Should a person belonging to this social group decide to start the second-chance education, she/he will face many obstacles. In this article, three institutional obstacles will be presented and it will be shown that interpretation of the person in charge may cause many troubles for the disabled students.

I. INTRODUCTION

After the Second World War the new Government established so called "social partnership" (*Soziale Partnerschaft*) and "social market economy" (*Soziale Marktwirtschaft*) in order to provide the best possible social and economic support for all citizens of the state. The new bills and regulations enabled also the health and educational system to give needed support, almost to all people. One of the fringe groups, persons with disability, hasn't always received adequate support. This paper will show that the "preferred treatment" (*positive Diskriminierung*) of the persons with disability by the Austrian bills depends on the interpretation of the respective laws and regulations by the person which takes the decision concerning the problems or needs of the affected person.

According to the information given by the World Economic Forum in the Year 2015 Austria was ranked as the 12th richest country of the world in the period between 2009 and 2013. Within the EU, Austria was even positioned in the second place, surpassed only by Luxembourg. The average Gross Domestic Product (GDP) raced from the year 2009 from US $ 38,577.30 to US $ 43,344.79 in the year 2013. Due to this statistics Luxembourg's GDP was between 2009 and 2013 US $ 76,832.29 and US $ 79,593.91.[1]

A. World Economic Forum

The World Economic Forum was founded in the year 1971 in Davos. The focus of this organization is building an International Organization for Public-Private Cooperation. 46 years later, in the year 2015, Swiss Federal Council has officially recognized the World Economic Forum as an international entity.[2]

Due to the Annual Human Capital Report 2015 Austria was listed on the 11th place with the total population of 8.558 million inhabitants and working age population of 5.726 million. In this year the GDP was US $ 45,411. This ranking included 124 countries worldwide.[3]

1 "Österreich zwölftreichstes Land der Welt", Der Standard, August 19, 2015, accessed March 28, 2016, http://derstandard.at/2000020950785/Oesterreich-zwoelft-reichstes-Land-der-Welt

2 World Economic Forum , http://widgets.weforum.org/history/2015.html, accessed March 28, 2016

3 World Economic Forum, Human Capital Report 2015, 78

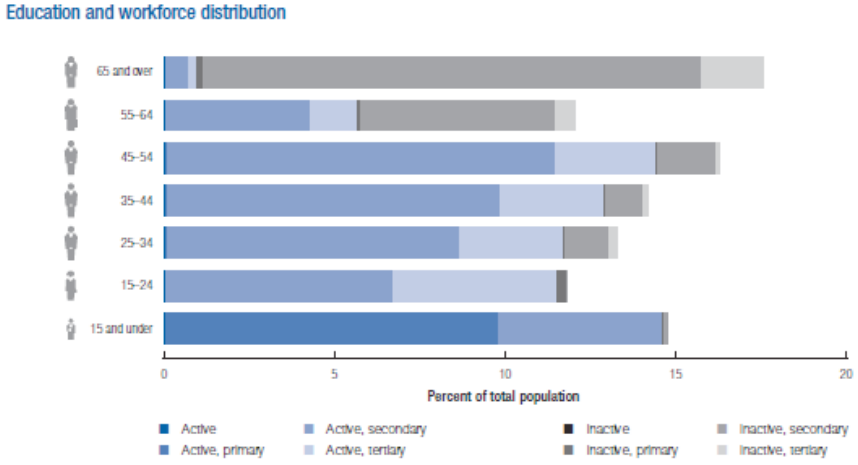
Table 1.: HUMAN CAPITAL INDEX austria 2015

Human Capital Index 2015	
Rank	11 (out of 124 countries)
Score	81.02
Total population (in 1,000s)	8,558
Working age population (in 1,000s)	5,726
Tertiary educated population (in 1,000s)	1,180
Aged dependency ratio (%)	26.4
Child dependency ratio (%)	21.9
Median age of population (years)	42
GDP per capita (constant 11 US$, PPP)	45,411
Labour force participation rate (%)	61
Employment to population ratio (%)	58
Unemployment rate (%)	4.9

Source: World Economic Forum, Human Capital Report 2015

The following chart provides information about the distribution of the education and the workforce among the age groups. For the five cohorts on age groups of 25 years and above, the blue-shaded part of the bar represents total labor force participation by persons in each of the age cohorts. The black-shaded part of the bar represents economic inactivity.[4]

Table 2.: HUMAN CAPITAL INDEX AUSTRIA 2015



Source: World Economic Forum, Human Capital Report 2015

4 World Economic Forum, Human Capital Report 2015, 48, 78

Table 3 presents the distribution of all students according to the special branches of studying. The main focus was on Social Sciences, Business and Law, followed by the Education and Technical sciences.

Table 3.: HUMAN CAPITAL INDEX AUSTRIA 2015

Students by field of study	Currant Enrolment	Annual Graduates (latest year)
Total	376,498	69,385
Agriculture	4,886	1,271
Education	56,334	11,226
Engineering, Manufacturing, Construction	54,830	11,459
Health and Welfare	28,488	6,315
Humanities and Arts	47,096	6,623
Sciences	41,164	6,198
Services	8,921	1,930
Social Sciences, Business, Law	133,878	24,003
Unspecified	901	360

Source: World Economic Forum, Human Capital Report 2015

B. Disability Report: 11% of people with disabilities manifestly poor

In order to get an overview about the situation within disabled persons' population in Austria, the Ministry of Social Security carried out a survey from October 2007 to February 2008. A total of 8,195 randomly selected people (out of 8.2 million inhabitants of Austria) participated.[5]

20.5% of all respondents reported one permanent impairment, amounting to 1.7 million people of the Austrian population in private households. This figure includes people with mild visual impairments as well as people with mental health problems or completely immobile people.[6]

Permanent impairments are strongly age-dependent. For those aged under 20, the proportion of the impaired was 6.2% for men and 4.5% for women; in the age group of 20 to 60 16.3% of men and 14.7% of women. The highest value is reached within the over-60s (men: 48.3%; women: 48.5%) in both sexes.[7]

5 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

6 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

7 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

Around 20.8% of female and 20.2% of the male population have a long-lasting impairment. In the age group under 60 years of age, men were slightly more affected than women. In the age group above 60 years of age, it is noted that women faced slightly more permanent impairments. The most common injuries are permanent problems with mobility. Extrapolated, around 1 million people, or 13% of the Austrian population in private households were affected.[8]

7% of the population had more than one impairment, which was about 580,000 people dealing with this type of problem. Elderly women living alone are primarily affected by multiple impairments. The common occurrence of multiple impairments, older age and the fact of living alone cause increased needs for care in this population. More than 579,000 people (7% of the population) have other issues, especially chronic stress (for example, allergies, hypertension, migraine, asthma, diabetes, or chronic pain).[9]

Mental problems or learning problems affected 1% of the population (approximately 85,000 people) and speech problems 0.8% (around 63,000 people). Permanent impairments occur for both sexes most frequently at older ages. Women aged 60 years and above were generally more affected.[10]

Persons with permanent mobility problems are the largest group among the disabled persons (1 million or 13% of the population). Women are in total more often affected than men (14.1% versus 11.9%).[11]

Around 50,000 people (0.6% of the population) are wheelchair-bound. The vast majority of wheelchair users (90.3%) used manually operated wheelchair. Permanent movement impairments occur in the 60-year-olds most frequently, regardless of their degree of severity. Women in this age group are affected by both serious and medium-scale movement impairments most frequently.[12]

C. Austrian federal government as employer of people with disabilities

The Republic of Austria as an employer tried to comply with the obligation to employ disabled people under the Disabled Persons Employment Act to the

8 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

9 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

10 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

11 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

12 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

furthest extent. The number of disabled beneficiaries employed by the state steadily increased in recent years and indicated that the public service was increasingly willing to employ persons with disabilities.

In 2006 there were only 268 obligatory positions not occupied by 6,102 obligatory positions and the employment obligation was thus fulfilled to 95.6%. The problem areas that impede employment opportunities for people with disabilities are among the executive positions and the education (teachers).[13]

II. STATISTICAL DATA TO DISABILITY AGE, STRUCTURE, EDUCATIONAL LEVEL AND POVERTY RATE

A. Disability Age Structure

9% of people above 16 years of age were, according to the European Union Statistics on Income and Living Conditions (EU-SILC), disabled in the narrow sense. (Total of 633,000 persons). In the age group of 16 to 64 year-olds 5% of women and 6% of men are handicapped. For those over 65 years of age there were 28% of women and 20% of men. As women were overrepresented among the elderly, it means that almost twice as many older women (214,000) than men (111,000) suffered from disabilities.[14]

31% of disabled people (200,000) were living in single households. There were much more people with disabilities living alone in all age groups in comparison to the non-disabled persons. Among the people with disabilities of working age (16 to 64) 19% of men and 23% of women were living alone; in the over 65 year-group men participated with 21% and women significantly higher (52%). This means more than half of older women with disabilities are completely dependent on professional and/or voluntary support from people who do not live in the same household.[15]

B. Educational level

The educational achievements of non-disabled people, compared to disabled ones, were significantly different. While 18% of non-disabled population members aged 24-64 completed only the compulsory education, the percentage among disabled persons of the same age was as much as 38%.[16]

13 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

14 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

15 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

16 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

53% of non-disabled people had completed an apprenticeship or middle school, compared to 51% of disabled people in this age group.[17]

While in the group of non-disabled men of working age 12% successfully completed only compulsory education, the share of disabled men was almost three times higher (32%). 23% of non-disabled 16 to 64-year-old women have a maximum of basic schooling, whereas this percentage amounts to 46% among women with disabilities of working age.[18]

While 60% of the 24 to 64 year old non-disabled men have a diploma, there are 58% of people with disabilities holding the same degree. For women in this age group, the difference is 3% percent (46% to 43%).[19]

Significant differences are noticeable in the secondary education level and when it comes to university degrees. Only 10% of disabled men of working age completed this level (29% of non-disabled men). For women, the ratio was identical (11% to 30%).[20]

Comparing all disabled with non-disabled persons over 24 years of age (including persons above 64) 51% of the disabled persons completed at least compulsory education (23% of non-disabled population), 40% an apprenticeship or middle school (51%) and only 9 % secondary level or a university degree (27%)[21].

C. Poverty rate

22% of non-disabled population had a per capita household income in the lowest income quarter of the population, as many as 34% of disabled people reached only this level. It is noticeable that women of working age (38%) and those over 65 years of age represented one of the largest groups among the lowest income level population.[22]

The poverty rate of disabled people of 20% was almost twice as high as that of non-disabled people (11%). Disabled women had almost a double poverty rate comparing to men (23% to 16%). The higher risk of poverty among disabled peo-

17 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

18 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

19 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

20 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

21 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

22 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

ple is mainly due to the lower labor market integration, lower earnings and the consequences of a failure or lower professional position resulting in lower calculation of pensions and social benefits.[23]

Apart from the uncertain income situation, disabled people were affected to a much greater degree by additional problems than non-disabled persons. 11% of people with disabilities are manifestly poor comparing to the 4% of non-disabled people. 16- to 64-year-old disabled women (16%) were the most affected by visible poverty.[24]

III. SECOND-CHANCE EDUCATION AND THE INSTITUTIONAL OBSTACLES

The federal aid for students in Austria was introduced in the 1960s as an additional incentive aimed at increasing accessibility to the universities and also to create possibilities for children from low-income families to start an academic career. Since 1992 the study financing has been linked to the other federal aid measures and the conditions of entitlement have been harmonized step by step. The federal aid measures of Austrian study financing can systematically be divided into two groups: transfer payments, which students receive directly in cash, and non-cash benefits.[25]

A. Conditions for the receipt of a study grant in Austria

After completing the secondary level, future students are allowed to apply for the study grant (*Studienbeihilfe*). The State Grant Service named "*Studienbeihilfebehörde*" prescribed the requirements for being awarded a study grant. Below are the most important ones:[26]

- The student has to meet financial requirements to be socially eligible. Determinants of social eligibility are income, marital status and family size. Furthermore he/she has to reach a reasonable success levels. He/she must not exceed the total envisaged study period by more than one semester. (Exception is given by illness, pregnancy, disability, military or civil service, etc.).[27]

23 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

24 Parlamentskorrespondenz Nr. 81 from 11.02.2009, accessed on 17.04.2016, https://www.parlament.gv.at/PAKT/PR/JAHR_2009/PK0081/

25 Studienbeihilfebehörde, General Condition, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/voraussetzungen/#c363

26 Studienbeihilfebehörde, General Condition, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/voraussetzungen/#c363

27 Studienbeihilfebehörde, General Condition, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/voraussetzungen/#c363

Each study must be started before the age of 30. (Exceptions exist for self-sustainers, students with children and students with disabilities, as well as a Master's degree). The student is not allowed to have any equivalent education completed (no bachelor or master's degree) at home or abroad. Exceptions are made for short studies and doctoral and master studies.[28]

B. Special support for disabled students

Theoretically, students with disabilities receive special support by the Austrian government incentives, which goes beyond the scope of financial support. In order to receive a study grant disabled students have to meet general requirements (as stated in part III/A). Furthermore, if a diagnosed disability is at least 50%, the duration of period for grant receiving is being extended for two additional semesters. The disability can be proved by the reference to the increased family allowance, as well as by the receiving of federal care allowance or evidence in accordance with the Disabled Persons Employment Act.[29]

Furthermore, the duration per level of study can be extended by one semester for students who suffer from malignant tumors, leukemia, Hodgkin's disease or cerebral palsy or a prosthetic leg (thigh) need, or about half of the foreseen studies for the blind or severely visually impaired students and students who are deaf or hard of hearing or mainly dependent on the use of a wheelchair, wearing a cochlear implant, are undergoing dialysis or suffering from cystic fibrosis.[30]

In addition, the study grant is increased by € 160 per month for blind, severely visually impaired or predominantly reliant on the use of a wheelchair students, or € 420 per month for students who are deaf or hard of hearing or wear a cochlear implant.[31]

For students with disabilities the age limit at baseline is being raised from 30 to 35 years. The study must be started before the age of 35. Otherwise, there is no entitlement to a study grant.[32]

28 Studienbeihilfebehörde, General Condition, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/voraussetzungen/#c363

29 Studienförderung, Behinderung, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/behinderung/#c530

30 Studienförderung, Behinderung, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/behinderung/#c530

31 Studienförderung, Behinderung, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/behinderung/#c530

32 Studienförderung, Behinderung, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/studienbeihilfe/behinderung/#c530

C. Study graduation scholarship

Due to the facts given in the Introduction and the section on the Statistical data, only 9 % of disabled persons in Austria have completed the secondary level or obtained an academic degree. If a disabled person decides to start studies between the ages of 35 and 41, they are only eligible for the Study Graduation Scholarship grant (*Studienabschluss-Stipendium*).[33]

This scholarship is available to students who are very close to finishing their studies. The requirement is that only a few more tests to graduation are to be passed, and - if a thesis / Master thesis is to be written - it must already been in progress but not yet completed.[34]

Students pursuing a doctorate degree cannot receive this scholarship.[35]

The student can become a recipient of this scholarship if he/she either studies at a public? or private university and his/her studies have almost been completed up to the level where a dissertation / thesis is to be defended and missing exams from compulsory and/or elective subjects amount to the maximum of 10 semester hours or 20 ECTS points (or two exams). The topic of the thesis must already be determined and the remaining study time cannot exceed two semesters before they graduate. Another requirement is that students must have been employed (at least semi-employed) at least 36 months out of the last 48 months or 4 years prior to the award of the degree scholarship. [36]

The student must be unemployed for the duration he/she is receiving the scholarship.[37]

Students cannot be recipients of any scholarship in the previous 48 months, and must be younger than 41 years of age.[38]

Final requirement is that they are still to complete their studies. Exception: Even in cases when a student holds bachelor's degree, a graduation scholarship

33 Studienförderung, Studienabschluss-Stipendium, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/beihilfe-beruf/studienabschluss-stipendium/

34 Richtlinien für die Vergabe von Studienabschluss-Stipendien, GZ 54.120/0024- WF/VI/6a/2014, 18. September 2014

35 Studienförderung, Studienabschluss-Stipendium, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/beihilfe-beruf/studienabschluss-stipendium/

36 Richtlinien für die Vergabe von Studienabschluss-Stipendien, GZ 54.120/0024- WF/VI/6a/2014, 18. September 2014

37 Richtlinien für die Vergabe von Studienabschluss-Stipendien, GZ 54.120/0024- WF/VI/6a/2014, 18. September 2014

38 RIS, Bundesgesetz über die Gewährung von Studienbeihilfen und anderen Studienförderungsmaßnahmen (Studienförderungsgesetz 1992 - StudFG), § 52b, accessed on 17.04.2016, https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer =10009824

may be granted for a subsequent master program.[39]

The payment of the degree scholarship is transferred on the first day of the month, as defined by the student in the application and is being paid for a maximum of 18 months. However, the payments shall cease if the course is completed earlier.[40]

The scholarships range between € 700 and € 1,040 per month, depending on the extent of the previous activity. In cases when the recipient of the degree scholarship receives support of other institutions to cover the living expenses, the amount being paid as a degree scholarship is being reduced. Should the sponsored study require any tuition fees, those will be refunded.[41]

If the student cannot graduate within six months after the last payment of the scholarship is transferred, the graduation scholarship must be reimbursed. If the study is unlikely to be completed by the end of the scholarship the student has the opportunity to participate in a Psychological counseling coaching for students.[42]

The student is required to pay the social insurance from the amount received for a scholarship in order to be able to use MD services if necessary. The social insurance fee for the students at the regional public insurance (WGKK) is € 55.40 per Month.[43]

Social insurance fee for the self-employed (SVA) amounts to € 232.56 per Month.[44]

D. Social Fund of the Austrian Student Union

This Fund was established many years ago. According to the guidelines given by the Austrian Federal Ministry of Science and Research, GZ 54.201/62-I78a/2009, from the 22nd December 2009 a new set of conditions for being eligible to receive special support were established. The main requirement for granting this support is a social welfare status of the student applying for the support.[45]

39 https://www.stipendium.at/studienfoerderung/beihilfe-beruf/studienabschluss-stipendium/ Studienförderung, Studienabschluss-Stipendium, accessed on 17.04.2016,

40 Richtlinien für die Vergabe von Studienabschluss-Stipendien, GZ 54.120/0024- WF/VI/6a/2014, 18. September 2014

41 Studienförderung, Studienabschluss-Stipendium, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/beihilfe-beruf/studienabschluss-stipendium/

42 Studienförderung, Studienabschluss-Stipendium, accessed on 17.04.2016, https://www.stipendium.at/studienfoerderung/beihilfe-beruf/studienabschluss-stipendium/

43 Wiener Gebietskrankenkasse, Selbstversicherung für Studierende, accessed on 18.04.2016, http://www.wgkk.at/portal27/portal/wgkkversportal/content/contentWindow?contentid=1 0007.725230&action=2&viewmode=content

44 SVA Bescheid über die Höhe der Sozialversicherung, 22.11.2012

45 Richtlinien für die Gewährung von Unterstützungen durch die österreichische Hochschüler/innen/schaft, § 1, Section 1

The content of the § 13 is focused on the support of the students with registered disability. In the chapter 1 reads that the students suffering from at least 50% disability Austrian Students Union gives a special grant, adapted to the needs of the specific student. The information and advice is provided in cooperation with the Disability Officer and the student bodies at the respective University.[46]

In the chapter 3 and 4 it is stated, that the regulation regarding the confirmation of the social welfare status is not required for the students with a registered disability (at least 50% disability). Furthermore, it is stated that the financial support of up to € 4,000 can be granted.[47]

E. Access to the Vienna University of Economics and Business (WU-Wien)

Vienna University of Economics and Business (WU-Wien), one of the most important universities in Austria, was ranked on the 43rd place out of 85 European Universities of Economics in the Financial Times report 2015.[48] After many years under construction this university moved into the complex of new buildings in the 2nd district of Vienna. The mission of the WU is to provide a high-quality education for more than 22,000 students. WU's 2,100 employees have been working continuously to further improve teaching and research quality and campus life in all relevant areas. Through the education available to students they contribute to sustainable, future-oriented thinking, responsibility in business and economics, and the development of solutions to economic, social, and ecological problems. Furthermore, WU's modern campus also offers a range of attractive dining options and publicly accessible grounds that encourage students and staff to explore Campus WU and enjoy its unique atmosphere. WU Campus provides meeting places and open spaces.[49] The entire campus is accessible - all information points on campus are equipped with pyramid writing, Braille and reading services. The paths are wheelchair accessible.[50]

46 Richtlinien für die Gewährung von Unterstützungen durch die österreichische Hochschüler/innen/schaft, § 1, Section 1

47 Richtlinien für die Gewährung von Unterstützungen durch die österreichische Hochschüler/innen/schaft, § 13, Section 4

48 WU Vienna, Press release, 07.12.2015, accessed on 18.04.2016, https://www.wu.ac.at/presse/presseaussendungen/presseaussendung- details/detail/financial-times-european-business-school-ranking-wu-auf-platz- 43/?tx_news_pi1[controller]=News&tx_news_pi1[action]=detail&cHash=376f3bab9912c7e b9d4de2e0e05caa4e / http://rankings.ft.com/businessschoolrankings/masters-in-management-2015, accessed on 18.04.2016

49 WU Vienna, About WU, accessed on 18.04.2016, https://www.wu.ac.at/en/the- university/about-wu/

50 WU Vienna, Infrastructure, accessed on 18.04.2016, https://www.wu.ac.at/en/the- university/campus/infrastructure/

According to the Google Maps the closest public parking space is 800 meters away from the entrance to the university library.[51]

Underground parking space of the WU Campus has 411 parking places.[52] According to the information provided by the Representative of the disabled students at the WU the parking space can be used free of charge only by the full-time students of the WU. All other students and visitors (regardless whether they are disabled or not) have to pay a fee in amount of € 2.20 per hour.[53]

Disabled students of the other universities in Vienna or from other cities in Austria may be discouraged to use the WU library due to this potentially very high expense.

IV. CONCLUSION

In this chapter the results and impacts of all three institutional obstacles (Study graduation scholarship, Financial Support of the Austrian Students Union, and the Access to the Vienna University of Economics and Business) will be presented.

A. Consequences of the applying for the scholarship

If a registered disabled student, older than 35 and younger than 41, apply for the Study graduation scholarship (III/C) he/she has to quit his/her job. According to the § 2, section 2 and § 14, section 2 of the Disabled Persons Employment Act (*Behinderteneinstellungsgesetzt*) the representative of the Austrian Ministry of Social Security and Welfare will request an official statement from them. The student has to confirm, that he/she has received a grant and has resigned from their job. Right after this, an official decision will be issued. The student will be informed, that according to the § 2, section 2, point a he/she has no special protection on the Labour Market due to the fact that he/she takes part on an educational/training program. Furthermore, the student has to apply for the new ID card for disabled people without special protection.[54]

51 Google Maps, accessed on 18.04.2016, https://www.google.at/maps/dir/48.2179888,16.4061509/Universit%C3%A4tsbibliothek+der +Wirtschaftsuniversit%C3%A4t+Wien,+Geb%C3%A4ude+LC, +Welthandelsplatz+1+1,+102 0+Wien/@48.2156404,16.4061401,17z/data=!4m8!4m7!1m0!1m5!1m1!1s0x476d07cb1a63aeb f:0xf856f023c1e031c4!2m2!1d16.4089236!2d48.2137796

52 APCOA Garage Campus WU, accessed on 18.04.2016, http://www.apcoa.at/parken- in/wien/campus-wu.html

53 Email correspondence with Dr. Herbert Loicht, WU Representative of the disabled students, February and March 2016

54 Bundessozialamt Wien, Bescheid über die Aberkennung der Begünstigten-eigenschaft – Decision about the withdrawing of the beneficiary status for the registered disabled people according to the Disabled Persons Employment Act, 19.11.2012

Losing the special protection on the Labour Market (*Zugehörigkeit zum Kreis der begünstigten Behinderten*) is also related to the loss of some financial and tax benefits (exemption of the annual car-tax, loss of the §29-ID for the reserved parking space for disabled, etc.).

After a student graduates and scholarship payments cease, he/she must apply again for Assessing of the degree of disability, regardless of possessing a disability ID for many years. Due to the fact that the new list of disability evaluation was implemented in August 2010 it could happened that a student with 90% of disability after the new assessment is now appraised to suffer from only 50%.[55]

Furthermore, the student is forced to apply for the social insurance at the Regional health insurance (*Gebietskrankenkasse*) or at the Social insurance of the self-employed (*Sozialversicherung der gewerblichen Wirtschaft*). The monthly fee for this insurance is between € 55.40 and € 232.56 per month. If the student gets a scholarship between € 700 and € 1,040 per month that means that in the worst case the student receives less than the amount Viennese Social Care System pays to the people within this support (in the year 2016 - € 837.76 for a single person, 12 times per year).[56]

A disabled student wouldn't face all this problems if the person in charge at the Student's organisation would be able to give a proper consultation but according to Ms. Uta Weber, head of the legal department: "The consultancy tasks of the students' scholarship advisors consist of providing the student with the necessary information regarding the degree of completion of studies and the related performance records and deadlines. It is not the task of the consultants to provide students with additional information on social law, the AMS's services or the Disability Discrimination Act."[57], although on the homepage of the *Stipendienstelle Wien* following information is stated: "Benefits of other means of subsistence (such as **unemployment benefits**, training allowances, internships, maternity leave, pensions, etc.) reduce the scholarship.[58]

If the student does not apply for this scholarship and his health situation does not change, his/her grade of disability will stay the same for his/her whole life.

55 Einschätzungsverordnung, BGBl II., stated on 18.08.2010, No. 261

56 Magistrat Wien, Mindestsicherung, accessed on 18.04.2016 https://www.wien.gv.at/gesundheit/leistungen/mindestsicherung/

57 E-Mail, Uta Weber, head of the legal dept., Studienbeihilfe Wien

58 Stipendienstelle Wien, requirements, https://www.stipendium.at/studienfoerderung/ beihilfe-beruf/ studienabschluss-stipendium/

B. Result of the Applying for the Social Fund of the Austrian Student Union

As already stated in III/D, one of the special tasks of the Social Fond of the Austrian Student Union is to support disabled students pursuing their degree.

After applying for the support at the Student union it took few months to get an answer. Although the application clearly stated that the applicant is certified as disabled with 90% disability, he was requested to present all bank statements for the last 12 months before applying for the support.

It was obvious that the person in charge ignored the state legislation (?) concerning the regulations for the support to disabled students in order to avoid any payment to the applicant.

C. Access to the area of the Vienna University of Economics and Business

The Vienna University of Economics and Business was established in 1898 by the Austrian state Ministry of Culture and Education. From the time it was established until today, the University was owned and run by the Austrian state. Today, that means that all buildings of the University, as well as the parking space under the University, is also considered to be state property and that this area should be freely accessible to all disabled people with the § 29-ID.

According to the decision of the Vice-Rector of the University the free parking spaces have been reserved only for the full-time disabled students of the University. This decision is against the Austrian Road Traffic Act. Not even the Special Representative of the Disabled Students at the University was able to exert any influence and eventually convert this decision.

Finally, it can be stated that the inaccurate information can have long lasting and very negative impact to the disabled students. The three examples described here are just an excerpt on a long list of problems that disabled people have been facing in every day's life. Therefore many disabled people will rather choose to keep their certified disabled status then try to study and possibly lose all benefits, as well as to put themselves in a very uncertain status.

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A SECRET IN EUROPEAN TOURISM

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ABSTRACT

Europe, but with Balkan spirit, great coast, three preserved UNESCO World Heritage sites, and a unique flag. The small country of Albania. Main purpose of the study is, to discover Albania's tourism supply,its great possibilities, which, if properly developed could have a great contribution to the increasment of the value of GDP. The development of the tourism industry is crucial for Albania, because it influences its economic development a lot more than other industrial branches. Based on this, a qualitative study aims to point out strengths, weaknesses, opportunities and threats in tourism development. The study will refer to european and world analysis regarding tourism and its contribution to the economy, to statistics from national institutes and will be based in a comparison with neighbour touristic countries. Considering it a priority sector for the economic development, the importance of inovative management and marketing in tourism is crucial for the future. The paper aims to come up with recommandations in these fields.

I. INTRODUCTION

Albania covers an area of 28 748 square kilometres, where a population of 3.3 million people lives. The connecting bridge between West and East has an ancient history and culture, almost as old as its neighbour roman culture, but absolutely different from it, a unique language as old as the world itself, which does not belong to any language group and a wonderful nature, where a high diversity of mountains, sea and lakes lie only few kilometers away from each other. This is a naturally blessed place.

Until late, tourim refers mainly to primary potentials, which have to do with nature and culture, more than secondary or tertiary potentials, which have to do with infrastructure, tourism policies or overall economic development.

The touristic offer is certainly very diverse and attractive. A lot of archeological sites from roman, greek and otoman periods, a remarkable hospitality and tradition, a natural richness, expressed in all elements of nature; forms of relief, climate, hydrography, flora and fauna. All these potentials, make tourism in Albania, the most perspective economic activity.

Furthermore, as a country that is situated is the mediterranean region , Albania has possibilities to develop tourism, not only based in its geographical position and existence of physical- geographical elements, but also because of the Mediterranean area, which is very well known for the high level of tourism development.

The Mediterranean, is considered as the most important touristic region in the world, visited by about 30 percent of the tourists total number , especially in summer.

II. ALBANIA AND THE GLOBALIZED TOURISM MARKET

The question that rises to one's mind is, what is the contribution of tourism industry in Albania's economy and what place does Albania take in this globalized touristic market, that is experiencing an unpredictable development. Presumably, this place should not be very different from the rest of Europe, its economic level and GDP should be similar to its neighbour countries.

According to a report of the World Tourism and Trade Organisation, published in 2015, Travel and Tourism's total contribution to GDP for Croatia is 11.3 billion dollars, for Greece 36.0, for Bulgaria 5.9 billion and for Albania only 2.4 billion.

While Greece is ranked in the eighteenth place in Europe, for its GDP level and Croatia is number 27, Albania still remains in the six last places. Its nominal GDP is the 37-th among European countries. While the total contribution to em-

ployment, in Croatia is 301.600 jobs, in Greece 821.900, in Bulgaria 338.400 and in Albania 180.100 jobs, which is predicted to increase in the next 10 years.[1]

It comes to our minds a next vagueness, which requires an explanation, which is; what prevented this country, with such great resources from being among its well-known touristic neighbor countries? The small country inside Europe territory, has been outside the whole world's attention for a lot of time. Until 1990 only a few, knew about Albania's live and country's resources.

The situation may be easier to understand, if we try to imagine briefly North Korea, the country that symbolizes extreme dictatorship. It was like a new North Korea was founded; right it in the middle of Europe. The main factors, which changed Albania's future and destiny, were political factors. Obviously, these factors were closely related and had a strong influence on all other social, economic, technological factors. As a matter

of fact, the whole society of that time experienced an ugly transformation, which would impact the future of Albania.

No religion, no private property, no connection with any other western European country are just a few measurements the government of that time took, in order to "protect" Albania.

It came, as a normal consequence that, most of people, who were not allowed to practice religion for about 50 years, forgot to pray and to thank God. Their followers, missed the lessons of life, the same language of the entire world, know how to believe in and to thank God.

The denial to have a private property may have been even worst and its consequences even more tragic. Moreover, to citizens was denied the right to compete, there was no freedom for development in the society; people lost their feeling of motivation, their interest, their creativity, their hope. Life became suddenly grey.

These are only a few of the consequences communism brought to Albania. About sixty years of physical, but mostly psychical violence. One could expectedly think that Albanians would get tired of hoping and suffering for a better future and many of them had a good reason to leave the country. And that is what they did, the first moment they had the possibility. A great number of citizens left the country in 1990. The very bad news is that, even today a lot of people continue to leave Albania. In May of 2015, the number of Albanians who sought asylum in the country of Germany was higher than the number of Syrians [2].

1 WTTC, Travel and Tourism Econimic Impact 2016, Total Contribution to GDP https://knoema.com/atlas/topics/Tourism/Travel-and-Tourism-Total-Contribution-to-GDP/Total-Contribution-to-GDP-2011-USdollar-bn

2 http://www.euracti'v.com/section/global-europe/news/ad-campaign-in-albania-german-embassy-warns-against-economic-asylum/

An exodus that began about 30 years ago and has not stopped yet. A phenomenon related to the government but not to their country and their rich land. Today, as a matter of fact, there are more Albanians living outside it, all over the world, than inside. And so the story goes on, in the best period in history, when tourists are coming to Albania, its own citizens continue to go away from their own land.

B. BEGINNINGS OF TOURISM IN ALBANIA

In the year 1929, are registered the begginings of a simple tourism industry in the country. Albania had 13 holiday residencies and 27 hotels in all. Before World War II, were build Elbasan's thermal baths' and their capacity was about 200 beds.

Tourism's first steps were about 50 years later than in the neighbour countries, like Croatia or Montenegro. The first hotel in the country of Croatia, dates in 1980 in Opatija, about 50 years earlier.

Later in 1945, along Durres's coast, there were 15 vilas with 37 rooms and only one hotel with 28 rooms[3].

During the 1950-60, since Albania had no political or other relations with the west Europe or World, the political collaboration with Russia was intensified. In 1959, the president of the russian comunist party, N. Hrushov, visited Tirana. At that time, a larger number of tourists came to Albania.

Figure 1.: Tourists visiting Albania until year 1998 [4]

3 Doka DH, VII.2. Turizmi në Shqipëri, 17

4 Albanian Institute of Statistics. WTO (World Tourist Organisation) Report 2006

From the same period, is the only international hotel in the country until 1990, the "Adriatik" hotel. It dates in 1958 and it was build in the city of Durrës. Today, it is still one of the best 5 star hotels of the city.

The only form of tourism at that time, in our country, was the organisation in groups. Groups, could not be of less than 20 people and they had a well defined, standard programm. Individual trips, organised from tourists themselves were not allowed.

There is a considerable number of tourists visiting Albania around 1960-s, after the intesification of political relations with Russia. But the number will decrease again in the coming years. The number of tourists visiting Albania before 1960, the Institute of Statistics in Albania, was less than 300, and right after the 1960 there is noticed an increasment.[5]

From 1960, in the following 20 years, what we notice is a very low number of arrivals, which comes as a result of the interruption of relationships with the Soviet Union. At that time, Albania's relations with foreign countries became almost inexistant. The government collaborated only with China, for some more years. After that, the country passed in the conditions of a total isolation. No foreign relations, with no country in the World. The theory of " making everything by ourselves and only inside our country" began to spread. The country was transformed in a closed system, predestimed to fail.

At the same time, at neighbor countries tourism continued its normal development. The total number of tourists during 1960- 1990 in Albania, was about 1.6% of foreign tourists who visited Greece or Jugoslavia until 1990. It seems almost unbelivable, that in 1980 there were less tourists in Albania than tourists enterprises in Greece.

Tourists in Albania came from different countries, mainly from East Europe. Until the beginning of years 1960, about 98% of tourists coming to Albania were from Cekosllovakia, East Germany, Soviet Union. From 1970 until the years 1980, tourists began to come from both East and West Europe. From West Europe, tourists came mainly from Austria, France, Sweden and from South Europe, mainly from Italy.[6]

After the 1990, when the new era of democracy began, the number passed 40 000. This happened because of the interest this unknown place arouse. This number decreased again, because of the bad infrastructure conditions, which took time to change.

5 Albanian Institute of Statistics

6 Albanian Institute of Statistics

III. BEGINNINGS OF MODERN TOURISM

The era that began after the dictator's death, is considered, the era of liberal policies. A significant increase in the number of tourists was registered in the years1985-1990. In 1990, about 29.997 tourists were recorded entering Albania. That is a considerable number, comapared to 3748, which was the tourists number registered in 1980[7]. The main reason, was the interest Albania arouse as an unknown country.

It is interesting to mention that, the duration of stay is much shorter than in the years before. The reason may be, that the country was very unknown and the tourists were curious, but anyway they didn't want to be for a long time in the conditions of an uncomfortable infrastructure or a very unknown society. Albania had just ecsaped comunism.

Even in this period, the greatest number of tourists came from Europe, about 96.8% of the total number. 73.3 % of tourists were comming from South Europe, mainly from ex- Jugoslavia and Greece, 18.7 % came from West Europe and only 4.8% from East Europe. 1990 is an important year, as the first tourists from USA and Canada arrived in Tirana. Their number was 401 or 1.3% of the general tourists number.

It was in the beginnings of the 1990-s, that Albanians had for the fist time the legal right for a passport to travel outside Albania.[8]

Referring to the general situation and infrastructure details, in 1990 there were 27 touristic hotels in the country. Their capacity was 13 000 beds.

Albania had finally removed the obstacles of comunism and opened the road to itself, for a modern touristic development. After the 1990-s, all economic programs and policies considered tourism as a priority branch of industry, main pillar for the future development.

From year 2000 and later, when a lot of changements were made, the number of arrivals increased year by year. From the table below, we notice that every year more tourists enter in Albania.

7 Doka DH, VII.2. Turizmi në Shqipëri, 20-25 Doka Dhimiter,Turizmi në trajtimin e tij gjeografi, . në:"Studime Gjeografike", Nr.7.Tiranë2009

8 Albanian Institute of Statistics

Table 1.: Number of arrivals from year 2000 to 2015 [9]

Years	Total Number	Nights of stay (in thousands)
2000	317 149	98
2001	354 000	92
2002	470 574	143
2003	558 057	118
2004	645 409	90
2005	747 837	130
2006	937 038	136
2007	1.126.514	172
2008	1.419.191	130
2009	1.855.634	170
2010	2.417.337	185
2011	2.932.132	356
2012	3.513.666	353
2013	3.255.988	215
2014	3.672.591	260
2015	4.131.242	484

As excpected, the situation, was very difficult and because of the lack in investments in this sector until that time, the country had a lot of challenges to face.

The infrastructure was in poor conditions. There were no highways, connecting central Albania and touristic areas in south or north. At that time, it took six to eight hours to go to the beaches in the south coast, while today the disctance can be traversed only in 3 hours. There were no quality hotels, no booking maschines, no managing or marketing strategies.

There predominated a political insecurity and a scary legislation ambiguity. The absence, or the lack of capital, made impossible the building of real touristic places.

It was not the case, to talk about a touristic competition in the country. Instead of it, a really strong competition with neighbor countries and countries around the world. And the most important of all, we inherited a rooted culture, a comunistic mentality, which needed and still needs a long time to change. This is the reason why Albania is not ranked among its neighbour touristic countries. Mainly because of political factors, the ecnomy of this country didn't knew its best period yet.

Is it late today? Do we still have chances? How can we remain a unique touristic country, protect what we still have and try to improve, what we already have treated bad?

9 INSTAT, Statistical bulletins

It is never late to try to change thinks for better. This place, still offers a lot of touristic potential. Isn't it always better to try and give a chance than no try at all. But how to make such huge changement?

Better management would be a good answer for Albania. The great climate, with hot summer and mild winter, would extend the time, when tourists can come for beach and sand vacations. The summer season beginns actually in June and ends at the end of August. It may certainly beginn even earlier and end later.

Albania's geographical position in Europe it another great asset. It can be reached in a very short time, from many European countries. The flight distance, with most European states is approximately 1.30 to 2.30 hours.

Many toursits, living in cold places, can reach Albania in a few hours and enjoy coastal tourism, from May to October. Does it need a lot of investments to make the summer season longer?

The country, should be prepared for the season earlier. A large marketing campain about this place in Europe, would be a good start for many europeans, who know only few things about Albania.

Transportation is another factor, that influences directy people movement. Considered as one of the main pillars of tourism development, transport brings people near each other, gives them the possibility to visit new places, where a lot of facilities were build for them**.** Airport lines, ferry lines, other ground transportation lines and companies, car rentals, railway companies, all of them are very slowly developed in Albania. The prices to fly to Albania are among the most expensive prices, comparing to other European states.

Therefore an emergent measure, is to collaborate with many,new air lines, in order to offer a better price for incoming tourists. If these lines would work properly, the price would decrease, the tourist number would raise, but not only. Albania would have more satisfied tourists, who would like to come and visit it again. This is a project, private companies would be happy to do. The state should only create them the possibility to operate.

Cultural tourism, as a kind of tourism, that many people all over the world like, is the second most developed type, in Albania, after the first in line, which is the recreation tourism. Most of people, interested in this kind of tourism, come mainly from May to June and from September to the end of October. Frequently visited destinations are Butrinti, Berat and Gjirokastra, some of them, as mentioned, sites protected from the UNESCO.

What Albania can offer and what this land should consider as a future strategy is a tourism of special interest, like; natural tourism, adventure tourism (walks, nature excursions, riding, river rafting, parasailing, biking, diving, sailing, etc).

In the last years, for all the above mentioned activities, a higher interest has been noticed. According to reports of Ministery of Tourism, tourism of special interest in Albania increased with 15-20% and it represents 25% of touristic market. Statistic shows that the sports tourism may be a great resource and a type of tourism, which would contribute to the tourism industry. So let's stay focused in this direction, let's offer to tourist the necessary infrastructure to come in Albania and enjoy this type of tourism. We know the interest toword it is increasing. Than why not proffit from it? It is particular, it can not be found everywhere, this is something tourists are looking for.

While coastal tourism, as mentioned before, has the greatest number of international tourists. Statistics show, it increases 2- 4 % each year. Obviously, this is that kind of tourism, that people all over the world like most. This is probably, because they want to fly from they regular daty-to-day routine, relax, go to the beach, have a lot of fun. But, if do not create to tourists all necessary conditions; the good infrastructure, the good food, why not, a combination with sports tourism or nature tourism, we are risking to much. And not to forget, all these things must be offered with a competitive price. Tourists will not want to come back to Albania again if they do not find anything different from Spain, Italy or Greece. No one would spend the same ammount of money for less quality.

Today there are a lot of touristic agencies operating in Albania. They organize mainly outbound trips. It would be very good, if these agencies could develop more excursions for inbound and domestic tourism. There is a great interest from Albanians too, to visit their country and organized tours in natural resources are developing very slowly.

Tourists all over the world are searching for new, unknown countries. A good represantation of the tourism potential, with all its elements through a well organized inovative marketing strategy is necessary to make Albania known to other countries.

Eco - tourism, as a new branch of tourism, for which a lot of people are interested, may be the future of tourism in Albania. From just an individual journey it has turned into a "journey, where nature is the main component". If developed, eco-tourism offers also chances to financial adds for protection zones.

Another branch to be developed is the agrotourism. In coastal cities, the mediterranean cuisine is very promissing. Fresh products from the sea are not only very tasty but with a great price. In other areas, traditional cuisine needs to be developed more. We have traditional plated that combinet with culture and other traditions would be very interesting for foreign tourists.

It comes as a logical consequence, considering the increased international request for nature - tourism, an increased interest in new, undiscovered destinations, makes Albania a very promising touristic land.

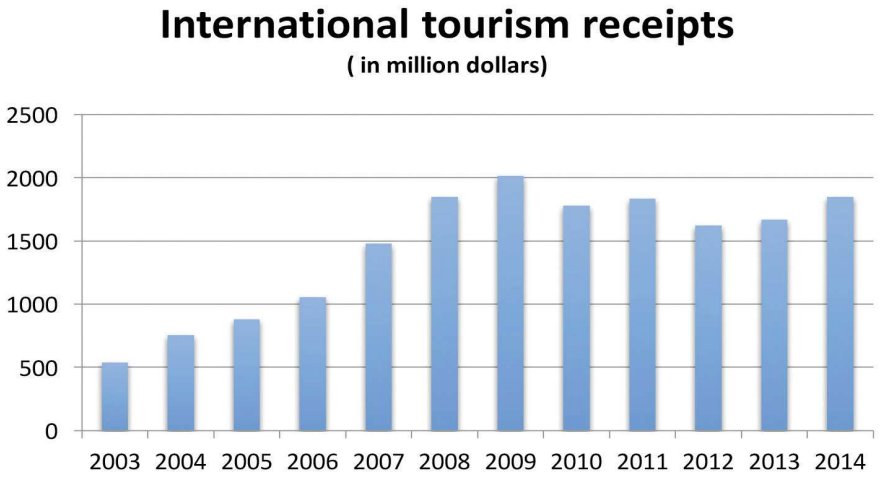
The well defined strategy for the continuation of tourism industry, is the main goal to be followed. While, at the same time, a good colaboration of public and private sector, the development of regional touristic associations, the informative marketing and international regional collaboration, are all important issues to be follwed in the path of development.

Only through strategies, based on clear processes and efficient activities, it is possible to integrate strengtheness and possibilities. Only through this way, we can offer to tourists better services in a highly competitive market.

Investments in market search and market development are necessary. It is a main goal, to transform weaknesses and threats in success. New products, new offers, better services are necessary.

Tourism today has turned to be a primary, quickly developing sector in the economy of the whole world. In the future it may probably become the greatest world industry. Albania has the fortune of posessing a lot of touristic potential, therefore this industry should be treated with priority and with the necessary attention. Since, for the moment, we do not have the conditions to develop other industries, like information technology or heavy industry, we should stay well focused in tourism.

Figure 2.: Expenditures by international inbound visitors[10]



In figure 2, is explained the quick and important impact, this industry has in the country's economy and GDP. This should make everybody aware, of the necessity to better develop tourism.

10 World Tourism Organization http://www.indexmundi.com/facts/albania/international-tourism http://www.wttc.org/-/media/files/reports/economic-impact-research/countries- 2016/albania2016.pdf https://en.wikipedia.org/wiki/List_of_sovereign_states_in_Europe_by_GDP_(nominal)

In the last 25 years, the sector of tourism is widely developed and infrastructure elements have improved. A great number of hotels and quality restaurants are build. There are actually more than 500 touristic hotels of different standarts in Albania, some touristic villages, holiday homes, treatment and curative centers, etc.

It is also a fact that the influence of tourism in the economy of Albania is very fast. Since we can not develop easily a heavy industry, and we still have a lot of unused toursitic resources, we should stay focused in tourism. Develop all possible kinds of tourism, especially new ones, care about resources, try to remain unique and not become comercial. This would be the future of Albania. And stay focused in world's specialists forecasts. Those would help as motivation.

Travel & Tourism is expected to have attracted capital investment of ALL19.9bn in 2015. This is expected to rise by 1.4% in 2016, and rise by 4.5% pa over the next ten years to ALL31.4bn in 2026. Travel & Tourism's share of total national investment will rise from 5.6% in 2016 to 6.5% in 2026.[11]

IV. TOTAL CONTRIBUTION OF ALBANIAN TOURISM IN THE GDP

A lot of improvements are made, but a more stable and coherent tourism strategy should be followed. The period of modern tourism is short but we can not follow good strategies, we need the best strategies, as the mediterranean competition is very strong.

Through the comparison explained below, it is aimed to show that Albania should have been steps forward than where it is compared to Montenegro or Croatia, reffering to the coutry's population, resources and geographical position.

Montenegro has a population of 621.383 people. Its Tourism total contribution to GDP is 1 Billion US Dollars. Albania's population is 2.774.000 people. The tourisms total contribution to GDP for Albania is 2.4 Billion USD. Meanwhile, Croatia's population is 4. 220. 798. The total contribution of Croatia's tourism to its country GDP is 11.3 Billion USD

If we follow this logic, the tourism's contribution to GDP of Albania according to Montenegro's pace should have been about 4 Billion US Dollars. While, Tourism's contribution to GDP of Albania according to Croatia's pace should have been nearly 9 Billion USD

Currently it is only 2.4 Billion USD and all the over mentioned factors have played an important role in preventing tourism development.

11 Travel and Tourism Economic Impact 2016, 5
http://www.wttc.org/-/media/files/reports/economic-impact-research/countries- 2016/albania2016.pdf
World Travel and Tourism Counsil - Economic Impact , 2016

V. CONCLUSIONS AND RECOMMENDATIONS

During these 20 years, the perceptible reduction of green spaces is evident in the country, especially inside cities, which comes as a result of exceeded urban buildings, of the expansion of network of trade and services. The hotel capacities, their furniture, their service, cleaning, water and energy supply is not in optimal conditions, especially in touristic zones.

We have all necessary inputs, but we are still not realizing the best outputs. This can be explained with the fact that we are making mistakes while processing. A lot of changes were made, but new management and marketing strategies are crucial, in order to compete in the actual market.

Albania should aim to develop a quality ecotourism instead of a masive tourism. All environmental conditions, in every geographical zone should be considered as very important and should be analysed properly. If it is given priority to ecotourism, Albania has the possibility to become a good exapmle, a model in Europe in this direction.We are still in time for this.

Another important step is the designing of explicit and possibly uncomplicated tourism strategies, while learning from experienced touristic countries. Giving priority not only to coastal cities but at the same time to mountain areas, where there is a great possibility to develop nature tourism and eco tourism.

There is a lot to change and meliorate in tourism legislation, where still a lot of uncertainty and difficulties exist. This is mainly referred to property issues in touristic zones and illegal constructions inside them. This is an urgent problem to be solved, as it prevents big investments from native or foreign investors

Oppening more professional schools, which are crucial for a qualified and well trained personnel. Albanians hospitality, the considerable workforce, the average age of population, are great premises necessary for the development of tourism industry in Albania.

Coherent marketing strategies are a main factor to make known to the whole world the real and beautiful touristic supply of Albania and become part of a highly competitive market.

Create the possibility to diverse, combined touristic offers, of a place where within three hours you can visit breathtaking landscapes of mountain, sea and lake.

Make the best to learn from positive exaples of world touristic countries, and one again, avoid negative experiences and strategies.

Embrace the advantage of being part of the mediterranean region and at the same time a brige between East and West and create new favorable policies.

Make investments and develop the train service, which actually is almost inexistent. This will be a long term and extremily necessary investment, which will ease a lot the movement of citizens and will shorten the distances.

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PERSONAL VALUES – SUMMARY OF MOST RECENT FINDINGS

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ABSTRACT

People are influenced by the environment they grew up (e.g. family, traditions, religion, commercials, idols) and on this basis they develop their personal values. Personal values influence behavior, decisions and therefore the whole life of people. When entrepreneurs set up and lead their company, their personal values influence employees and marketing strategies as well as products and services. The purpose of this study is to show what the most important personal values are in general and if there are differences or similarities between cultures. The paper submits an overview of value models and value studies, the most common and important personal values and value oriented leadership styles. This should provide a fundamental basis for further research on the influence and the impact of personal values in leadership for companies, employees and stakeholder.

I. INTRODUCTION

This paper should illustrate the importance of personal values on individual, organizational and social level. Values influence our whole life in many ways. When we were born, we were raised up in a certain family, with our own history, our own experience, on a certain educational level and religious convictions. We live in a specific geographical and political region; go to schools and universities where also certain values are communicated. Also all social activities have traditional or religious roots and a basis for values. In books and movies we find heroes and idols with their specific values and traits. Commercials transport moral messages. Last but not least, we start to work and have to adapt to the companies' rules. All these experiences influence our personality and also our own value system. In organizations the most important tasks of managers are to make decisions and to communicate with their subordinates for different reasons, e.g. giving work instructions, giving an overview about company targets or implementing new structures and strategies. Therefore, personal values of leaders will influence the organization as well as employees and products and services. Values can be expressed by symbols, by attitude and language of the person and thereby values become manifest within the organization. It is a common practice in companies to write down the desired values in a vision and anchor them in the corporate culture. Success of the vision depends on the credibility of the respective leader and his or her achieved results. On the other hand certain groups can become deterred of strong values, if they do not support them. Efficiency and profitability is in the focus of entrepreneurial activities. Therefore conflicts between organizational targets and personal values can occur. Leaders are able to change the organization's course seriously because of their personal value system which embosses the organization deeply. In Neuro Science there were findings that each rational decision also has emotional and moral components (Priddat 2010, 35ff). However, leaders also underlie social as well as economic forces. Diverging conceptions between superior, manager, subordinates or managing colleagues can sometimes inhibit the realization of personal value concepts. Value suppression on personal level or severe conflicts on team level or organizational level is the consequence. Strong external pressure can generate personal stress, which can lead into the "Lucifer Effect" (Zimbardo and Petersen 2008), in extreme situations. This effect could be evidenced in the Milgram Experiment or in the Stanford Prison Experiment and can cause situations and incidents where a person acts completely against the own value system (Hübscher 2010, 64f). Because of the large number of influence factors, each person develops an own value system. Therefore, only few universal values are valid for the whole so-

ciety or an organization. Most values are individually noticed by people and their importance is varying. In extreme cases complementary values compete within a society or are contradictory (Volkmann 2012, 154ff) like the value "freedom" and "safety", although they actually have equal importance.

II. PERSONAL VALUES

The term "value" is complex. It can mean the real – economic - value of an object itself, a rule for a cultural accepted path of life or a final target like achieving an object or an immaterial situation like e.g. peace or friendship (Klein 1991, 20ff). Sometimes the term overlaps with morality or ethics. Therefore, it is necessary to find an appropriate definition for this paper.

A. Definition

Wieland (Wieland 2010, 28ff) defines the sum of virtues and value concepts as motives for social actions. Those interact with organizational structures and form a value system. Spranger (Spranger 1928) according to Bruno and Lay(Bruno and Lay 2008) saw them as a bundle of likes and dislikes, obligations, prejudices, personal judgements and inclinations. Athos and Coffey(Athos and Coffey 1968) considered that values are perceptions about what is desirable for the person. Gordon(Gordon and Gordon 1996) meant that values are principles which provide beliefs, attitudes and behaviour. Schwartz (Schwartz 1992, 4) followed this definition and amended as a concept or belief of behaviour or final aim people want to achieve which differs on importance and the type of goals. Klein(Klein 1991, 48ff) said that the related contents and personal conditions, like the grade of conviction, stableness, estimation of relevance and awareness, also play an important role. Beyond that the specific meaning of a value for a person and within the society is also relevant. On this basis it can be said that values are beliefs, attitudes and behaviour which are either a path of life or a final target and are influenced by personal conditions, social systems and estimation of relevance and awareness.

B. Personal Value Models

The first step in researching personal values was to find existing personal value models in sociological and economical science literature. The investigation proved that the research on personal values goes back to the early twenties century.

i. Spranger's Types of men

The German philosopher and psychologist Eduard SPRANGER (Spranger 1928) defined six different value attitudes of men. These are:

- the theoretical man, who is interested in discovering the truth
- the economical or utilitarian man, whose interest are the useful things and methods
- the aesthetic man, who is interested predominantly in harmony and form
- the social man, who is interested to help and develop other people
- the political or individualistic man, whose interests are power, influence and self-development
- the religious or traditional man, who is interested to find the sense of life and live a senseful life

Based on this value attitudes, ALLPORT, VERNON and LNDZEY(Allport, Vernon, and Lindzey 1960) published the first Study of Values in 1960 according to the personality theory, that people have developed specific and stable traits because of their environment and educational and family background.

ii. Rokeach's Terminal and instrumental values

Milton ROKEACH(Rokeach 1973) developed 1973 a set of terminal and instrumental values for his survey. Terminal values are those which people target in their life, whereas instrumental values are those which are supportive for a successful life. As terminal values were determined: (1) true friendship, (2) mature love, (3) self-respect, (4) happiness, (5) inner harmony, (6) equality, (7) freedom, (8) pleasure, (9) social recognition, (10) wisdom, (11) salvation, (12) family security, (13) national security, (14) a sense of accomplishment, (15) a world of beauty, (16) a world at peace, (17) a comfortable life, (18) an exiting life. Instrumental values were defined as: (1) cheerfulness, (2) ambition, (3) love, (4) cleanliness, (5) self-control, (6) capability, (7) courage, (8) politeness, (9) honesty, (10) imagination, (11) independence, (12) intellect, (13) broad-mindedness, (14) logic, (15) obedience, (16) helpfulness, (17) responsibility, (18) forgiveness. On this basis Shalom SCHWARTZ's survey (Schwartz 1992, 4ff) worked on the question, if there are universal personal values, which are independent of nationality.

iii. Schwartz' index of value type

A modification of former theories under the focus of three universal human requirements (biological needs, social interaction and group survival and function) lead Schwartz to the bundling of the fifty-six single values of Spranger and the subsumption beneath ten value categories.

Types of Value according to SCHWARTZ(Schwartz 1992, 6f):

- Self-direction (freedom, creativity, independence, choosing own goals, curiosity, self-respect)
- Stimulation (an exiting life, a varied life, daring)
- Hedonism (pleasure, enjoying life)

- Achievement (ambition, influence, capacity, success, intelligence, self-respect)
- Power (social power, wealth, authority, preserving the public image, social recognition)
- Security (national and family security, reciprocation of favours, sense of belonging, health, cleanliness)
- Conformity (obedient, self-discipline, politeness, honouring of parents and elders)
- Tradition (respect for tradition, devoutness, accepting the portion in life, humbleness, modesty)
- Benevolence (helpfulness, responsibility, forgivingness, honesty, loyalty, mature love, true friendship)
- Universalism (equality, unity with nature, wisdom, a world of beauty, social justice, broad-minded, protecting the environment, a world at peace)

He also introduced „spirituality" as an eleventh type of value with the single values „a spiritual life", „meaning in life", „inner harmony" and „detachment", but the results of the survey did not support the universality of this value but this aspects seem to differ in each culture. There were some single values which are not consistent across samples and cultures, like „self-respect". Therefore they were not used for the standard-indexes. The big difference between Rokeach's single value's approach and Schwartz „index of values type" is the fact, that single values differ more between cultures than the Schwartz's value type categories. The system of the value type categories covers the most important personal values which seem to be universal(Schwartz 1996, 21f).

C. Personal Value Studies

In the following part of this paper different important personal value studies on European and World wide level should be introduced. The long-term studies on this global level are evidence for the obvious importance of this topic in science as well as in politics.

i. European Value Studies

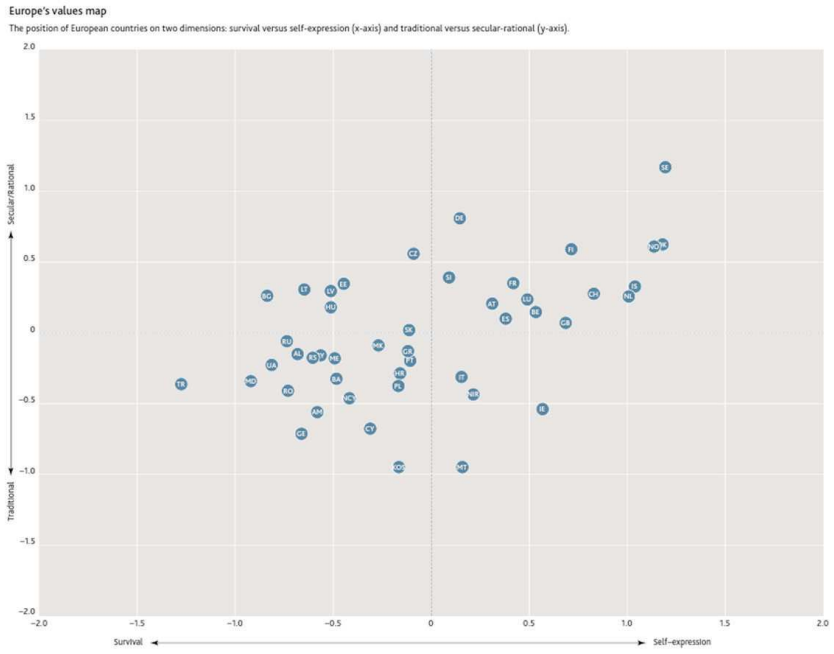
In the early seventies of the last century the European Community discussed if there is a so called „common European identity" based on a set of specific values and started the European Values Study project. This is based on regularly conducted surveys, which include adult citizens from age eighteen and older. The surveys interrogate individual opinions of religion and morality, marriage and family, society and politics, work and leisure. After more than twenty years of observation the results have shown a lot of differences between European Countries but little evidence for common values(Arts and Halman 2014, 1ff). On basis of the ques-

tioned value categories the few common conclusions in this survey are(Halman, Sieben, and Zundert 2012, 132):

- Attitude to Europe – the majority is for the EU, but only few feel like European Citizens
- Importance of Family – Europeans think rather traditional, female work is accepted but children come first
- Work – an interesting job is important but good salary is the most important factor
- Religion – Europeans are religious, but there is an increase of personal matters
- Politics - democracy is approved but there is only few confidence in the governments
- Society - tolerance and solidarity is relatively high
- Well-being – people are quite happy and satisfied

On the two-dimensional Inglehart – Welzel Map it is displayed, that European Countries are quite heterogeneous. While the northern and western countries are on the upper right corner, where self-expression and rationality is high, the eastern and south-eastern countries tend to stay on the lower left corner, where traditional and survival values are.

Figure 1.: Comparison of European Countries in the inglehart & Welzel cultural map

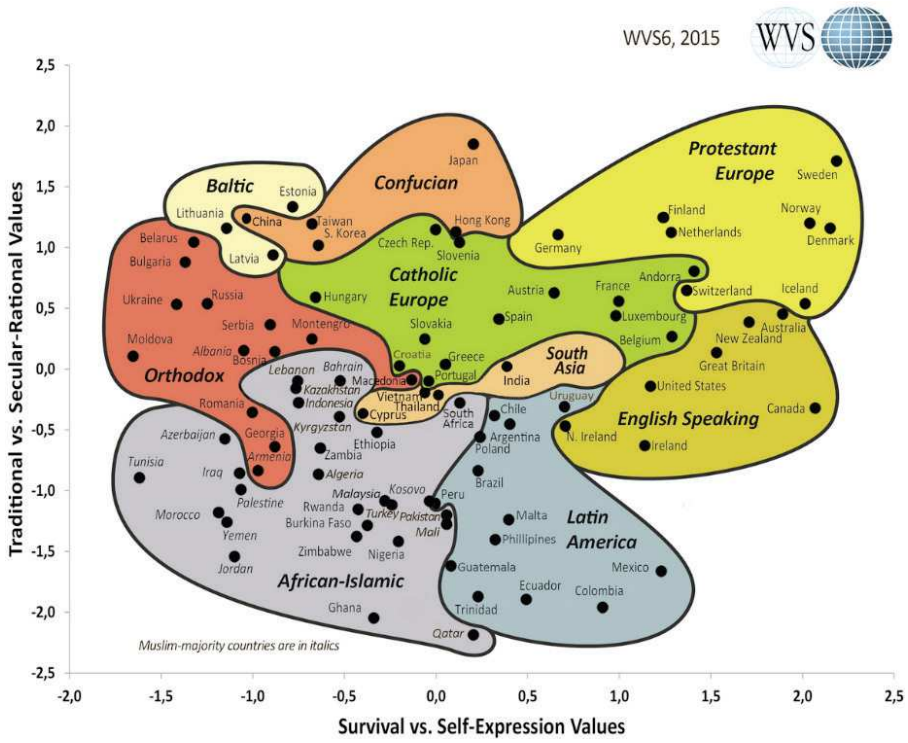


Source: Halman, Sieben, and Zundert 2012

ii. World Wide Value Study

Since 1981 the World Wide Values study is done on basis of four factors, pictured on the Inglehart and Welzel Cultural Map.(Inglehart and Welzel 2005)"publisher":"Cambridge University Press","publisher-place":"Cambridge, UK ; New York","number-of-pages":"333","source":"Library of Congress ISBN","event-place":"Cambridge, UK ; New York","ISBN":"0-521-84695-1","call-number":"HM681 .I54 2005","shortTitle":"Modernization, cultural change, and democracy","author":[{"family":"Inglehart","given":"Ronald"},{"family":"Welzel","given":"Christian"}],"issued":{"date-parts":[["2005"]]}}],"schema":"https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} It is differentiated between traditional versus secular-rational values and survival versus self-expression values. Traditional values represent the importance of family, religion, respect of authorities and focus on nationality. Secular-rational values in contrast to traditional values have a more pragmatically and materialistic approach and do accept things like abortion or divorce which would contradict traditional values. People with survival values have the focus on survival and security, whereas people with self-expression values individualism and tolerance as well as political participation and environment protection is more important. In comparison with the United States, the European Union is more rational/secular but less distinctive in self-expression. Because the survey is done regularly the change of cultural values can be uncovered over the decades. Over the period of the survey it could be observed that societies with rising standard of living and knowledge development and industrialization shift from the lower left side to the upper right side of the chart. On this fact the researchers conclude that developing self-expression values can lead to more personal freedom and democracy.

Figure 2.: Inglehart-Welzel Cultural Map World Values Survey 2010 – 2014



Source: Inglehart and Welzel, 2016

On basis of the German data of the worldwide value survey (WVS2006) Held et. al.(Held et al., n.d., 74) made a comparison of the Ingleharts post materialism concept, the Schwartz Value Inventory and the concept of value synthesis of Klages & Gensicke and found mutuality in the value concepts.

D. Summary personal value models

It could be shown a comparison of personal value models on a timeline. These models are consecutive and build the basis for personal value studies worldwide. Evidence has been given that there are universal value categories although there are big cultural differences between singular values. Not even in Europe are many similarities between the countries. The Inglehard-Welzel cultural map of world values shows an impressive picture of different cultures which are extended within a conflict area between survival-traditional and self-expression-secular values.

Table 1.: Comparison of personal value models

Types of men (Spranger)	Single value concept (Rokeach)	Index of value type (Schwartz)	Inglehart' Post materialism concept
• theoretical man • economical man • aesthetic man • social man • political man • religious man	• 18 Terminal Values (as final targets of life) • 18 Instrumental Values (helpful traits)	• Self-direction • Stimulation • Hedonism • Achievement • Power • Security • Conformity • Tradition • Benevolence • Universalism	• Survival values • Self-expression values • Traditional values • Secular - Rational values
1928	1973	1992	2001

Source: Research results

III. LEADERSHIP

Leadership has changed in the course of history and is still changing. Values – and its communication - are an essential tool for Leadership. Personality and value systems of leaders influence subordinates and organization. Organizational impressions can be positive factors for subordinates, if they identify themselves with those values but also negative, if not. In particular is this valid for organizations which are influenced by religious creeds. Therefore communication of specific and important company values is already important at the beginning of the employment process, to prevent severe conflicts because of major differences between organizational and personal values.(Hemel 2007, 120) That also can mean that not the most efficient person may be the best fitting employee but that one where personal values are very similar to the organizational values. Same goes for managers, although they usually have more scope, depending on hierarchy level, and can influence the organization by themselves. Leaders are role models for their subordinates and Fiedler argued that managers would not accept a leadership style which is against their values.(Bruno and Lay 2008) Value-based leadership does not only influencing people but also inspiring, motivating and focussing on the most important topics by word, action and example (Kraemer 2011, 2).

A. Definition

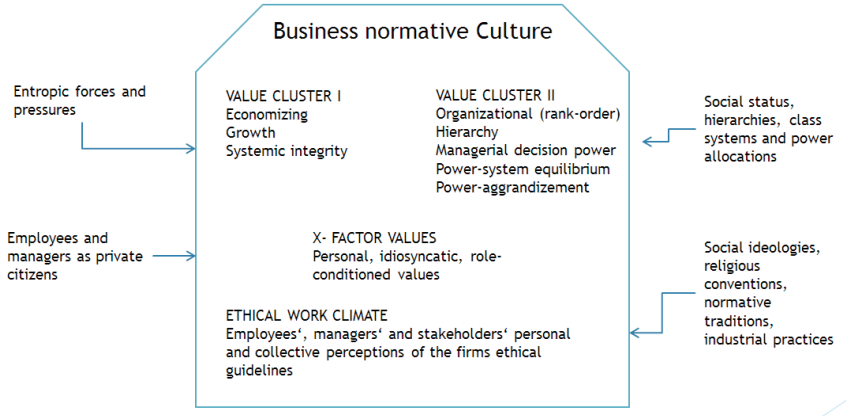
Steyrer defines leadership as the fact, that social influence from superior to subordinates in organizations is necessary for target achievement (Steyrer 2009, 26). But at the same time he expresses the suspicion of ideological transfiguration of the term. Nonetheless leadership is necessary more than ever in organizations to make clear which tasks are present and to motivate subordinates.

B. Value oriented leadership models and leadership styles

Only few leaders ask themselves what her or his values are or have an increased awareness for this topic. Though, to be aware of the own values as well as the companies values is an important leadership tool for managers. It means to know what is „the right thing to do" in a specific situation and to decide on this basis (Gentile 2010, 27) and not only because of regulations and supposed constraints but on their own personality and internal attitude. It makes leaders more credible in the eyes of their employees. SCHEIN (Schein 2010, 3) declares that leaders create, embed and manipulate corporate cultures. The other way round, if a culture is already stabilized, it structures the organization and specifies which kind of leadership is expected for this organization. FREDERIK (1995, 28ff) developed a model of original business values, which are: economizing, growth and systemic integrity. In economizing resources are used to produce an output which leads to growth and profit. It is the most important value in business. However, he denies that profit would also be a business value but achieves it as an outcome of economy (Frederick 1995, 51). Systemic integrity is building a certain corporate factor on basis of the corporate mission and organizes people and processes for promoting this mission. It is more or less understood as „corporate culture".

Managers have different to work on levels and they have to cope with their own and business related values. As already described above, the most important three business values according to Frederick (Frederick 1995, 38) are economization, growth and integrity. There are also organizational regulations to comply with, like hierarchies, power systems and class systems. And at last there are conventions, ideologies and traditions he or she has to respect.

Figure 3.: The value arena of managerial work



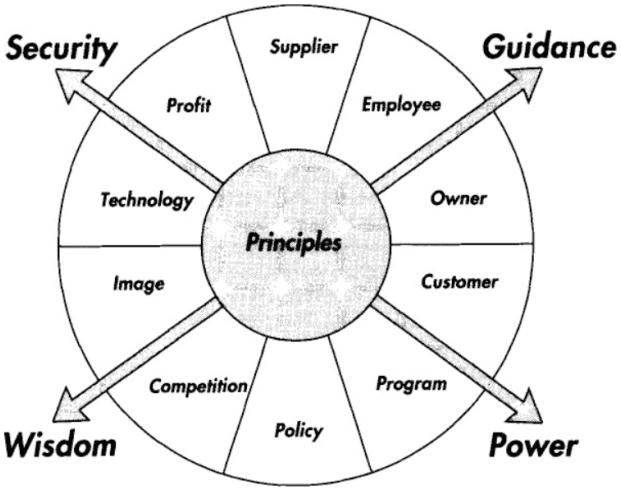
Source: Frederick 1995

It has to be differentiated between original business values, corporate values and the personal values of managers, who are based on character and personality. These three components build a very special values bundle, which leads to the unique output of a company.

i. Principle Centered Leadership

Covey (1992, 19) defined four important dimensions on those principles of people in general, but also managers, should be based on to have a successful and effective life. These principles are defined as security, guidance, wisdom and power. He argued that if people live on these principles, they would be more balanced and the principles build a well-grounded foundation for decisions. Between those four principles, which should be balanced are the fields of life and work.

Figure 4.: Principle Centered Leadership - Alternate Organizational Centers



Source: Covey 1992, 27

In an organization Covey's developed four levels of Leadership and key principles on those people have to work on(Covey 1992, 28):

- personal level – trustworthiness (working on the own personality)
- Interpersonal level – trust (interactions with other people)
- Managerial – empowerment (organizing work within the company properly)
- Organizational – alignment (teambuilding, structurizing, strategy)

The characteristics of principle-centred leaders are defined as (Covey 1992, 33ff):

- Life Long Learning (learning of experience, further education, curious, many interests, initiative)
- Service oriented (thinking of others, are happy to help)
- Optimistic (cheerful, friendly)
- Believing in people
- Having a balanced life (humorous, socially, many interests, self-confident, no overreactions)
- Adventurous (creative, strong will, initiative no fear of failure)
- Synergistic (smart and hardworking, improving
- Self-renewable (exercising physical , mental, emotional and spiritual)

Covey (1992, 284ff) defines transformational leadership as a method with a focus on long-term goals, missions and strategies, preoccupied with values, morals and ethics, releasing human capital, aligning internal structures and leading out in new directions. Transactional leadership on the other hand is built on the employees' work pressure, preoccupied with power and politics, is short-termed, provides profit maximization and works with human relations and tactical concerns.

ii. Value based Leadership

Kraemer (2011, 13ff) describes a circle of four principles of leadership, which are self-reflection, balance, true self-confidence, genuine humility. Self-reflection is important for leaders to recognize their own strength and weaknesses and to reflect the own decisions, goals and priorities. To be balanced is the second principle and it allows maintaining a good overview, recognizing the impact of decisions and keeping the focus on long-term strategies and goals. The third principle, true self-confidence, means that a leader has a realistic view of his accomplishments, communicate clearly and encourage employees to speak frankly, also in difficult situations. Genuine humility is the forth principle. Leaders should be respectful to all of their employees and never overestimate their own personality.

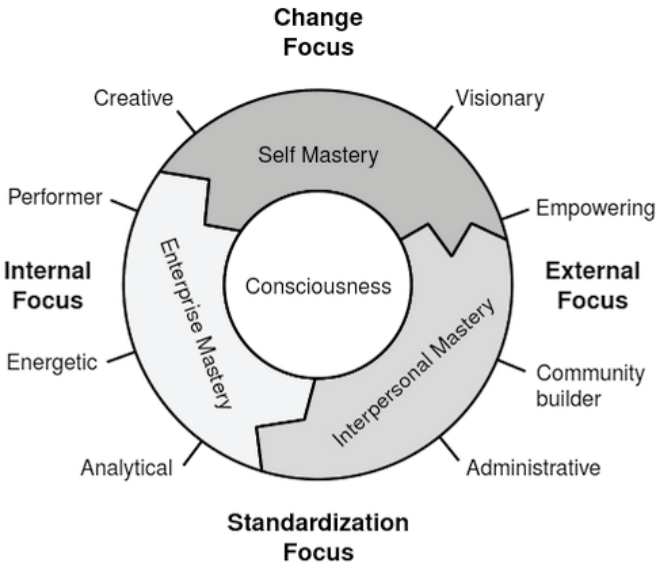
Figure 5.: the four principles of Value-based leadership

Source: Kraemer 2011

iii. Transformational Leadership

The transformational Leadership model (Hacker and Roberts 2004, 3ff) is based on different levels of management and leadership. It includes the managerial aspects as well as the leadership aspects and has four different focuses. These are the external and the internal focus of the leader's personality and include also a change and standardization focus. The core aspect is, as well as in other models, that the leader should have a distinctive consciousness for the development of situations, people and personal matters. Three perspectives have to be observed and continuously improved. These are the personal perspective, the interpersonal perspective, which means the interaction with employees and stakeholders and the enterprise perspective. This comprehensive observation should lead to a personal transformation.

Figure 6.: Transformational Leadership Model



Source: Hacker and Roberts 2004, 3f

Table 2.: Comparison of value oriented leadership styles

Principle Centered Leadership	Value Based Leadership	Transformational Leadership
• Wisdom • Guidance • Power • Security	• Self-reflection • Balance • Genuine humility • True self-confidence	Self Mastery Enterprise Mastery Interpersonal Mastery

Source: Research results

All three leadership styles have a strong self-reflection or consciousness component in common. They also focus not only on the leader as a person but also on the organization and the interaction with employees and stakeholders. The models rely more on the personality than on the hierarchical status or the power system of a company.

c. Value based leadership studies

After investigating value based leadership models, the question, if there related studies with survey results available, should be answered. The studies from GUTH and TAGIURI (1965) and LUCK and OLIVER (1974) investigated values of American managers. Both found out that manager values focused predominantly on Economics, Politics and Practice. However, BRUNO and LAY (2008) doubt these results because of the influence of the corporate environment and needs, which leads to a selection of similar personalities in the recruiting process. The pragmatic requirements of the job also may lead to similar behaviour and values. GABELE (1991, 83ff) investigated the value system of entrepreneurs of small and medium enterprises in a survey and focused on the entrepreneur's role as owner, as employer and as competitor. Requested values were:

Entrepreneur in the role of owner:

- Cooperation with other companies
- Participation in equity
- Grade of Input of survival instruments
- Grade of tax avoiding
- Profit maximization
- Grade of conflict avoidance
- Income difference between management and employees
- Usage of power
- Grad of intuition
- Participation in profit

Entrepreneur in the role of employer:

- Equal wages for equal work
- Company policy – job of management or employees?
- Conflict solution
- Employee sacking
- Respect
- Employees participation in management
- Leader involvement in personal employees problems

Entrepreneur in the role of competitor:

- Business with big companies
- Business Changes
- Expansion in foreign markets
- Growth

Interestingly there were found significant differences of value oriented business behaviour for SME depending on the country size. SMEs of small countries are working harder on financial security and survival and rely strong on their own intuition. SMEs in big countries let employees participate in management and share their profits more, try to avoid conflicts and use their power, when necessary. SMEs in big countries appreciate their employees and accept solving conflicts with strikes more than SMEs in small countries. SMEs in small countries try to avoid changes, whereas SMEs in big countries try more to find cooperation, try to grow, and making business with big companies and expand in foreign markets. HOOD (2003, 269f) worked on the relationship between CEO values and leadership style to reveal and understand the impact on ethical organizational practice. Social values (freedom, equality, world at peace), morality based values (forgiveness, politeness, affection), personal values (honesty, self-respect, courage, broadmindness) and competency-based values (logic, competence) and the relationship to the leadership styles (transactional, transformal, laissez-faire) the have been investigated. Leaders who predominantly rated themselves high in morality-based and social values seem to promote ethical culture in their organizations. The personality traits honesty and integrity turns out as a basis of effective and ethically leadership. Leaders who rated all four categories of values high assessed themselves as transformational leaders. The laissez-faire leadership style was negative related to competency-based values and transactional leadership was related to diversity training and socially correctness but without deep conviction.

IV. CONCLUSION

This research has shown that there are multiplicities of value models, which had been developed over about one hundred years. The younger models have been influenced by the older models. The term value has been defined in different ways, with variable emphases. Although there is evidence for universal value categories, the importance and acceptance of single values differ significantly on cultures. The topic itself seems to be important for politics and with the long-term world-wide value study the value change between the cultures could be observed. Considering business values, there were observed different value levels for leaders. First is the organizational level, where economical forces like growth or economizing are acting. Also at this level are organizational structures, hierarchies and power systems. On the second level are the personal values of leader and employees and on the third level is the environment system, which includes stakeholders, traditions, convictions and ideologies. Because of growing participation processes in the importance of value oriented leadership may rise. Hence, value based leadership styles will gain meaningfulness. Three of those are shown in this paper. The similarities lie in the strong self-reflection and self-awareness component of the leading person and in the holistic approach. Further research should be done on the comparison of value oriented leadership styles and the connection to personal traits and values of managers. Moreover there are some deeper questions, which should be investigated in further research. First question is, if value oriented leadership could be suitable for every kind of industry or organizational form or if there are certain requirements like e.g. the level of education or the grade of independence of the staff. The second question is if value oriented leadership models and leading with values are the same or if these models are focused on only few values and neglects other values which could be also important in leadership. And at last it should be clarified if those models are already applied in practice and to what extent and impact.

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KNOWLEDGE EXCHANGE WITHIN INDUSTRIALCLUSTER ECOSYSTEMS

Alexandra Arbter

Title: Knowledge Exchange within High-tech and Technology-intensive Cluster Ecosystems of MNCs

ABSTRACT

An increasing urge for new and striving products and markets have taken multinational corporations of high-technology and intensive industries away from the traditional innvoation process and turn towards regional industrial cluster knwledge-ecosystems to benefit from spill-over effects, collaborative innovation and develop or sustain their competitive advantage. This paper is in the early stages of preparation for a doctoral thesis and therefore aims to collect information from a review of present scientific literature in the fields of knowledge management and economic clusters and if open innovation has been placed into context with cluster knowledge development.

I. INTRODUCTION

The topic investigated in this paper is the fact that technology-intensive industries face challenges that question the traditional innovation process and therefore are in a constant search to bridge that gap. Challenges such as corporate R&D divisions not delivering value add, but storing data only in restricted local repositories; not improving organizational processes, nor investing in their employees or monetizing their information. Additionally, due to changing relationships in regard to globalization, the continuous efforts to drive competitive advantage of multinational corporations is progressively influenced. One way to overcome such challenges is a geographic concentration of production and/or service companies. However, this does not represent a new economic development as its research plays a fundamental role in understanding recent years' commercial agglomeration, i.e. industrial cluster development. This paper intends to study evidence regarding the knowledge exchange of clusters being impacted by open innovation through performing a literature review examining whether such claim rest upon verifiable scientific findings.

A wide variety of research looking at geography, economic characteristics, and regional investigations, and many more artefacts. The examination of such industry innovative geographies began amongst others with Storper (1997), who highlighted the fundament of an increased connected world to be within regional communities and companies. In addition, Krugman's research investigated location and artefacts of companies, who influence growth of their economic motion (Krugman 1990, Krugman 1998, Fujita, Krugman et al. 2001). A topic found in the majority of such studies is the role of clusters, working as a catalyst for local economic development processes (Pitelis, Sugden et al. 2006). Yet again, the phenomenon of company clustering is also not new to science, but rooted way back in the first volume of Marshall's book on economic principles (1890), where he analyzed 'industrial districts'. Economic strategy scholars and students have been studying how a company's performance is influenced by clusters, but still require to differentiate amongst benefits linked to the effects of enhanced social interaction (Harrison 2007, Casanueva, Castro et al. 2013) and agglomeration economies (Shaver and Flyer 2000, Press 2006, Kuchiki and Tsuji 2010). An association of clusters in one form or another, benefits of a company's production and/or increased employment creations. Either way, increased financial impact of such economic communities, has significantly raised the attention towards cluster research over the past decades. Next to that several local regional growth policies have been designed to benefit on correlated and codependent firms (Desrochers and Sautet

2004), but it was not evident until the "cluster" based economic development strategy by Michael Porter (1998) was published. Porter's study based on the hypothesis that related and interdependent companies' environmental concentration within in a specific area of interest, results in a "competitive advantage" of these companies. In later years, these analyses were further repeated and refined (Porter 2000, Delgado, Porter et al. 2014).

Critics raise that there is no clear classification of the term 'cluster', that it consolidates multiple relationships between companies and artefacts, but does not offer a clear guidance of geographical proximity in relation to globalization and spans such concentrations and nations in various ways. Also, such geographic concentrations of production and/or service companies, i.e. clusters, are regarded as key to challenges of local economic progress or development. Consequently, a perception widely developed is that 'clusters' are essential for warranting local economic survival in a globalized economy (Pitelis, Sugden et al. 2006). There is only minimal comprehension around the necessities of their success and impacts, positive or negative. These interrelationships between, e.g. industrial location and innovational behavior have turned into vital features of regional development. Delgado, Porter, and Stern (2014) indicate that contemporary research assumes an initial state of cluster environment as a given fact and ignores the continuous evolution of cluster structure, i.e. shifting priorization of information technology clusters from hardware to software as core trade. They also raise concern that industry patterns transform over time, impacting regional historical structures of industries by developing a new industry evolution, emphasizing the importance to understand these drivers.

The scope of this research is providing an overview of scientific research on the agglomeration of high-tech and technology-intensive industries and their benefit through knowledge exchange within the aspects of 'open innovation' to sustain competitive advantage. From this theoretical research three hypothetical arguments shall be investigated by comparing findings of several scientific researchers within published work: (1) knowledge in clusters is developed by organizational collaborative interaction; (2) cluster knowledge benefits from potential knowledge spillover effects; and (3) knowledge exchange in clusters is not only based on the concept of collective action.

The research approach has been through literature review, utilizing Google Scholar for keyword search and temporal relevance. Scanning scientific work using abstracts, introductions and conclusions as guides for further literature, and eliminating the non-relevant work. Evaluating credibility of sources by identifying criterias of sufficient quality, like empirical methodology, sources cited, cre-

dentials of any source (e.g. universities, organizations) and replication by other researchers.

The first part of this paper therefore aims to provide a picture on knowledge exchange of an economic cluster through investigating business environments of multinational corporations of both their collaborative interaction. The second part will look at the effects of cluster knowledge management through the innovation process. Cluster literature does pay attention to innovation, however there the scope of this paper is to add a nuance by investigating models of innovation process development different from the traditional one through research and development (R&D) driven. The third part will be reviewing different perspectives of the phenomenon of open innovation and investigates available literature on how it influences the cluster knowledge exchange. The paper will close with a brief conclusion and suggestions for further research toward the doctoral thesis.

II. KNOWLEDGE EXCHANGE AND CLUSTER

Global market dynamics, the speed of economic globalization and liberalization drive multinational corporations to continuously review effective management of their intellectual capital to ensure sustaining a competitive advantage. Along with, a firm's economical future depends on protection of intellectual property, process management, and protection of corporate assets. Driven by the declining costs of information flow impacted by implementation of technological innovations, the liberalization of markets and unification of financial streams, are eradicating away many conventional sources of competitive differentiation between countries (Govindarajan and Gupta 2000).

Companies have created through the development of clusters, an opportunity to decrease some of their investment costs. Therefore, they can enable the acquisition of professionals, knowledge, practices and tools, to gain access of shared supplies. This will then provide them a chance to create or benefit from potential knowledge spillover effects to enhance their own competitiveness (Gertler 2003, Tallman, Jenkins et al. 2004, Bell, Tracey et al. 2009, Casanueva, Castro et al. 2013, Connell and Voola 2013). In parallel to this interest in knowledge exchange and acquisition as a competitive differentiator, is then the significant question on how to manage the newly gained information or knowledge within an organization and then again how to extend it out or receive it back from an economic cluster (Chini 2004). A variety of definitions have been defined by researchers to provide better comprehension. Table 1 offers a view of some renown scientists, who theorized knowledge management.

Table 1.: definitions of Knowledge management

Source	Definition
Birkinshaw, 2001:12	Knowledge management can be seen as a set of techniques and practices that facilitates the flow of knowledge into and within the firm.
Buckley and Carter, 1999:82	Knowledge management contains 'the internal mechanisms for coordination, that is, for pooling the key information garnered by managers whose task it is to monitor external volatility and discover new opportunities'.
Davenport, 2001:117	Knowledge management is 'the capability to aggregate, analyze, and use data to make informed decisions that lead to action and generate real business value'.
Demarest, 1997:379	'Knowledge management is the systematic underpinning, observation, instrumentalization, and optimization of the firm's knowledge economies'.
Leonard-Barton, 1995:xiii	'The primary engine for the creation and growth and of technological capabilities is the development of new products and processes, and it is within this development context that we shall explore knowledge management . . .The management of knowledge, therefore, is a skill, like financial acumen, and managers who understand and develop it will dominate competitively'.
Malhotra, 1998:59	'Essentially, it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings.'
Stewart, 2000:42	'The premise is that knowledge assets, like other corporate assets, have to be managed in order to ensure that enterprises derive value from their investment in knowledge assets.'
Tsoukas and Vladimirou, 1996:973	Knowledge management 'is the dynamic process of turning an unreflective practice into a reflective one by elucidating the rules guiding the activity of the practice, by helping give a particular shape to collective understandings, and by facilitating the emergence of heuristic knowledge'.

Source: Chini, 2004:11, Exhibit 2.3

The differentiation of knowledge management interpretation can be as well separated into a human resource- and technology-oriented approach (Jacob and Ebrahimpur 2001) to better understand diving forces. Chini (2004) raises that an 'integrative' approach has been applied more often in organizations. Meaning to investigate knowledge management broader, from a combined human and technological view. However, it should be considered that capturing a company's en-

tire knowledge management system and processes (consisting of various forms of knowledge) can become extremely difficult. This is due to complex organizational structures and industry variations, resulting in multiple constructs depending on approach and view. In 1995 Krogh and Venzin offer in their research paper a categorization of knowledge management research streams:

- Knowledge management models
- Knowledge, conversation, cooperation
- Measurement and assessment of knowledge
- Knowledge transfer
- Knowledge structures
- Epistemology
- Knowledge and information technology
- Knowledge and power
- Knowledge, networks, and innovation

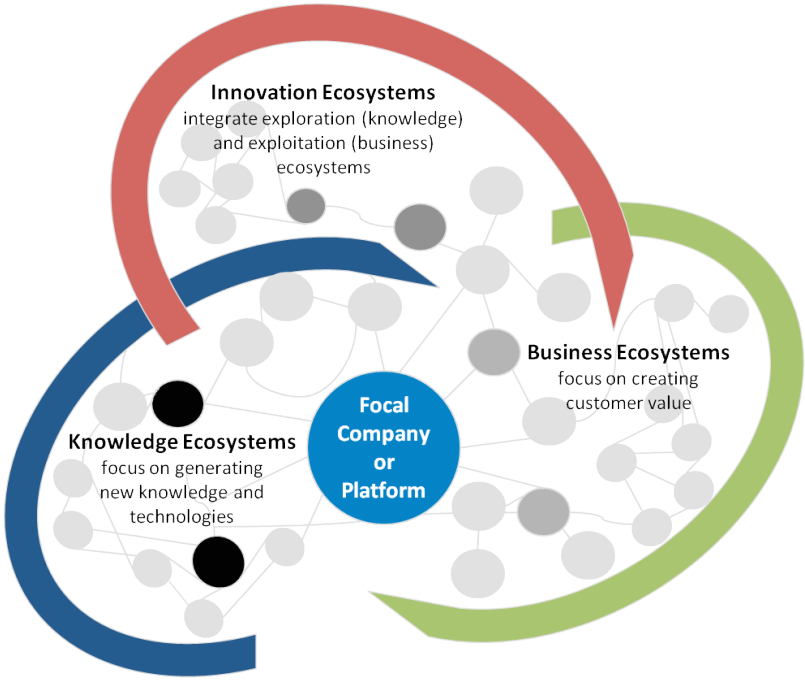
Source: Chini, 2004:12

However, to close the circle from knowledge exchange to clusters, one must explain what they are, and although there are multiple definitions available this one very well clarifies it: "Clusters have often been defined as geographic agglomerations of firms that are more or less specialized and interconnected, and that typically belong to particular industry sectors," (Manning, 2013:5). Then the scientific perceptions of Porter and Saxenian, offers insight to foundations of competitive and collaborative cluster mechanisms. Porter (1990, 1998, 1998, 2000, 2004) proposes many times that competition between co-located companies is an essential driver for cluster benefits. Ignoring this driver, other researchers suggest that cluster benefits are outcomes of knowledge externalities because of specialization of co-located companies functioning in connected industries (Marshall 1920, Arrow 1962, Romer 1986). The outcome of such propositions initiated the development of knowledge is "in the air" (Marshall 1920, Tallman, Jenkins et al. 2004) suggesting that informal information spillovers in clusters make co-located companies inaugurated to the spillover and relating to the significance of geographic proximity in tacit knowledge distribution (Polanyi 1966) supporting the knowledge is "in the air" theory. Saxenian (1996) strengthened this theory by underlining the significance of informal groups and social interactions in such communities as providing the foundation for knowledge spillover. Hence, due to their nature, a cluster develops through various formal and informal relations and therefore has been the focus of multiple studies of company networks.

Investigating the correlation between knowledge exchange and economic clusters, the findings presented that numerous researchers have investigated

knowledge exchange or knowledge transfer processes and innovation development within the cluster (Pouder and St. John 1996, Bell 2005, Capello and Faggian 2005, Mu, Peng et al. 2008, Chiu and Ting 2009). However, this kind of research, requires identifying variances between innovation output and diverse types of knowledge input. Tallman et al. (2004) provided a definition that a cluster is a knowledge creation center, which is characterized by the transfer of knowledge and information between its associates. The explanation of a geographical concentration of innovative actions, can be explained by a faster circulation of knowledge and information within such an industrial cluster. Allocating knowledge and information outside the cluster surfaces additional complications (Dahl and Pedersen 2004). Based on Bell and Zaheer's (2007), the benefit of such clusters is due to their geographic proximity, which facilitates especially tacit knowledge exchange amongst companies and their employees embedded into cluster networks and/or interconnected processes, systems or tools, i.e. an ecosystem. The boundary of ecosystem this paper addresses is scoped to be knowledge generation, development and exchange within a cluster, the knowledge-ecosystem of an organization and its clusters. An organizational ecosystem, is defined as "an economic community supported by a foundation of interacting organizations and individuals—the organisms of the business world," (Moore 1996). In order to further define an ecosystem, certain specifications can help differentiate in some ways: by geography (local, regional, national, global), temporal scale (from the past to future or static vs. dynamic interactions), permeability (open or closed), as well as by types of (knowledge, value, material) flows (Valkokari 2015) and therefore the distinction of ecosystems depends on their results, interactions, roles and responsibilities, and logic of action. "Business ecosystems focus on present customer value creation, and the large companies are typical key players within them. Knowledge ecosystems focus on the generation of new knowledge, and in this way research institutes and innovators, such as technology entrepreneurs, play a central role in these ecosystems. Innovation ecosystems occur as an integrating mechanism between the exploration of new knowledge and its exploitation for value co-creation in business ecosystems" (Valkokari 2015). These interactions between the different types of ecosystem, as indicated in Figure 1.

Figure 1.: Relationships between overlapping ecosystem types.



Source: Valkokari 2015:20, Figure 1

The knowledge ecosystem approach in this paper, is intended to provide an organizational insight into the 'knowledge flows' within the networks and relationships of a company. Hence, one can state such an ecosystem being made up of a number of artefacts: people, process, tools (technology) and content, focusing on generating new knowledge and technologies.

There is no differentiation in regards of knowledge exchange amongst high-tech, traditional (Chiu and Ting 2009) and mature intensity clusters (Bell 2005). The only difference is the actual benefit, which a company can extract from such knowledge: in high-tech clusters ground breaking product innovations (Capello 1999, Chiu and Ting 2009) and in mature (low technology intensity) clusters steady product and process innovations (Bell 2005).

The research of this paper also attempts to identify research on headquarter–subsidiary relations or networks of knowledge exchange within a cluster. "Studies of networks in clusters often consider different types of relations between firms (commercial, directive, subcontracting,…) and assume that these links imply a transference of knowledge, even though the informational content of the links that firms establish within the cluster have not been analyzed," (Casanueva, Castro, and

Galán, 2013:604). Bell (2005) creates an important distinction, where he separates amongst managerial (considering a transmission of tacit knowledge) and institutional networks (characterized through transfer of explicit knowledge). This distinction is necessary when evaluating corporate business performance against innovation (Polanyi 1966, Nonaka and Takeuchi 1995). Knowledge exchange inside an economic cluster can be considered as a result of such a headquarters–subsidiary relationship. It focuses on the aspect of centralization and standardization of decision making, while integrating subsidiary's portfolio or clusters to maximize an economic impact of a multinational corporation (Paterson and Brock 2002). However, in present market dynamics multinational corporations can no longer rely exclusively on their headquarters. A move from hierarchical to a heterarchical conceptualization has created a change in perception from the headquarter to the subsidiary level (Birkinshaw, Holm et al. 2000). When looking at an economic cluster network, as a single or multiple combination of subsidiaries of a multinational corporation's – it is made up of relationships with multiple levels of embeddedness. They can be "integrated into their own local context, forming relationships with external partners … the other hand, they are integrated in the MNC network," (Chini, 2004:38). Moreover, the higher the relations to external networks is, the less control the headquarters have over such a subsidiary (Andersson, Forsgren et al. 2002, Ambos and Reitsperger 2004).

The general understanding of exchanging knowledge is that tacit knowledge requires to be codified. Bathelt, Malmberg, and Maskell (2004) mention that through globalization (i.e. transition of markets) a reduction in friction (relaxed trade regimes, developing markets for intellectual asset rights and developments in information and communication technologies) has led to increased knowledge sharing. This developed the assumption that codified knowledge is nearly instantly accessible to all companies at zero expense regardless of location. They also add that there are significant costs related to the identification, assessment, categorization, and application of codified knowledge. Globalization therefore has the following effect on economic cluster existence, as being a combination of unequal geographic spreading and concentration of skills and expertise. Explained by unequal geographic distribution (i.e. physical proximity and temporal distance), location of skills and expertise, the coexistence of industries, interlinking specialization and producing the outcome as agglomeration effects (Porter 2000, Cooke 2005, Feldman, Francis et al. 2005, Iammarino and McCann 2006).

When investigating knowledge exchange in clusters, it is important to understand: "One of the main distinguishing features of spatial clusters of similar and related economic activity is that they provide opportunities for the transmission

of sticky, non-articulated, tacit forms of knowledge between firms located there. However, when this locally embedded knowledge is combined in novel ways with codified and accessible external knowledge new value can be created," (Bathelt, Malmberg, and Maskell, 2004:32). Considering knowledge management such economic clusters can be characterized as not only relying on headquarter (internal) or local intellectual assets, but also tap into dynamic, potential and available knowledge pools existing elsewhere (Scott 1988). This leads to the assumption that successful clusters have built and maintained multiple knowledge resources at low cost and with global key hot spots (Bathelt 2001), enabling effective information exchange and certain cost benefits.

Previously mentioned, geographical cluster proximity inspires social relations (Maskell 2001, Maskell 2001, MacKinnon, Cumbers et al. 2002, Tallman, Jenkins et al. 2004, Bell 2005). They arise, not in the whole cluster simultaneously, but "between groups of firms or subgroups, whose ties are of a family nature, or based on friendship, or cooperation, as analyzed in the first research question", (Casanueva, Castro, and Galán, 2013:605). Nodes in such a network are typically of more informal character (Bell 2005) and characterized by an intense relationship amongst its members. Rost (2011) states for this reason a specific cluster tacit knowledge to become less important than explicit or coded knowledge and consequently will provide more value in terms of social capital than individuals have opportunity to deal the information flow amongst the cluster groups, acting as entrepreneurs.

The frequency in which one company's individuals interact with another group of employees of another company, engaging in informal knowledge exchange is called by Arikan (2009) "social interaction intensity". Noorderhaven and Harzing (2009) add two key ways of social interaction within a cluster (1) informal exchange of information through sporadic and ad hoc meetings in local conferences, training, and other informal situations and (2) the mobility of employees within the cluster. They continue stating that social interaction intensity to be considered as one of the most effective mechanisms for knowledge sharing and transfer.

III. CLUSTER, INNOVATION, AND NETWORKS

Corporate relationships have been receiving continuous and increased popularity in organizational research and strategic management. This may be explained that companies used to be characterized as autonomous entities and competing against each other for the highest profit margin. In these days they find themselves however more and more embedded in professional (and social) networks exchange

relationships (Johnston, Lewin et al. 1999, Zaheer, Gulati et al. 2000). Particularly technology-intensive industries companies are increasingly collaborating, taking into consideration product life-cycle reduction, reducing R&D expenses and increasing knowledge specialization (Ritter and Gemünden 2004). Johnston (1999) defined industrial clusters as a consolidation of multiple independent companies coordinating their resources and actions and pursuing common targets. Industrial relations can be flat or vertical, linking a company to their suppliers and customers, as well as the competitive market, or additional entities (Zaheer, Gulati et al. 2000). Mefford (2009) mentions that CEOs, in order to keep their organizations competitive, require facing multiple challenges, e.g. lower cost and increased profitability, while simultaneously need to innovate and improve not only product design but also quality to compete in the global arena. Therefore continuously sustaining a superior business position in the global market, necessitates not only a cost emphasis, but also a focus on differentiation (Porter 2008) and the ability to operationalize that variation into corporate benefits.

Innovation can be a differentiator – Van de Ven (1986: 591) writes "an innovation is a new idea, which may be a recombination of old ideas, a schema that challenges the present order, a formula, or a unique approach which is perceived as new by the individuals involved". Meaning that missing important information is less likely for companies with several information sources, where multiple channels act as sources for new information which then can be combined with the purpose of creating innovation. Montalvo (2011:56) states "innovation, knowledge creation, and learning are best understood as the result of interactive processes among actors possessing different types of knowledge and competencies who come together and exchange information with the aim of solving technical, organizational, commercial, or intellectual problems". However, Gnyawali and Srivastava (2013:3) go a level deeper and split innovation into two categories, "technological innovations are often characterized as incremental or breakthrough; both types of innovations are important for survival and growth of firms". Low effort of new knowledge or product development can be found through incremental innovations (Phelps 2010). When looking at breakthrough inventions, they become the source of further state of the art industrial development and can break new grounds for companies involved (Ahuja and Lampert 2001, Zhou, Yim et al. 2005, Srivastava and Gnyawali 2011).

Influencing characteristics of the innovation process must be understood to comprehend, why or how a cluster impacts a company's innovation. Mohr (1969:63) writes that "innovation is directly related to the motivation to innovate, inversely related to the strengths of obstacles to innovation, and directly related to

the availability of resources for overcoming the obstacles." The beginning of innovation within an organization is awareness of technological trends and their driving forces to foresee benefits relating to future innovation prospects and an organization's need to admit towards an innovation engagement with supplying assets (Gnyawali and Srivastava 2013). Thus, an organization's capability to innovate is based on resources. But then companies struggle quite often with innovation itself (Mohr 1969, Ahuja and Lampert 2001). There can be limits within internal resources or competences in order to engage in revolutionary technological developments (Fleming 2001). Based on present literature research three critical innovation blockers were identified:

- Organizations frequently must deal with resource constraints (Mansfield and Rapoport 1975, Dougherty 1999, Ahuja and Lampert 2001) referring to absent technology and knowhow ideas. This is not only by volume of resources, but by the diversity of input available being critical. Organizations could grow internal, innovative talent. However, influencers such as standardized process governance, ambiguity and the pressure of time and cost (economically worthwhile) reduce the ability to develop such assets internally. Common knowledge forms such a cluster level of absorptive capacity (Cohen and Levinthal 1990), especially if the organization only requires such resources for limited time or purpose.
- Judging future technological trends involves a degree of uncertainty (Abernathy and Utterback 1978, Dickson and Weaver 1997). Especially when investigating them in an external environment and estimating impact of technology or product while considering within this context also changing technologies and existence of numerous technology opportunities. These items create a difficult foundation for an accurate assessment of the present situation and future deviations (Dickson, Ford et al. 2005).
- Organizational rigidity, which stands for an organization's inflexibility to undertake new initiatives and can be seen as a major obstacle to pursue the road towards innovation (Mohr 1969, Dougherty and Hardy 1996, Ahuja and Lampert 2001). Originating in deeply ingrained or challenging mental models influencing how new possibilities are perceived and acted upon (Hambrick 2007). Organizational routines, established to provide improved efficiency and control (Becker 2004), when in-built into daily practices any change necessary for innovation will drive resistance. Moreover, breakthrough innovations will then also have the potential to interrupt organizational peace (Kaplan and Henderson 2005) and therefore may be vetoed, should they not fit into existing organizational routines.

Each one of these barriers is on their own crucial for the pursue of innovation of an organization. These barriers in a potential combination make it enormously problematic for a company to rely exclusively on internal resources. This fact is very real as the observation can be made that more multinational organizations looking outside for valuable resources (Tallman, Jenkins et al. 2004), e.g. within geographic clusters (Pouder and St. John 1996, Whittington, Owen-Smith et al. 2009) and other strategic alliance networks (Ahuja 2000, Collins and Hitt 2006, Phelps 2010, Srivastava and Gnyawali 2011). But then again as much as there is a need to focus on innovation barriers in order to minimize their existence, catalysts of innovations require the same (if not more) attention and require fostering (Gnyawali and Srivastava 2013), such are:

- The awareness of an organization to notice market trends on time and envision technological developments and market trends (Chen, Kuo-Hsien et al. 2007). This requires observation of competitor technical developments (Rogers 2010), then leading to increased awareness of new ideas and opportunities and kick-start innovation projects by utilizing internal resources and assets through mimicking the observed and unconsciously generate innovation (March 1994).

The capability to understand and exploit cluster level absorptive capacity (Cohen and Levinthal 1990) is enhanced by companies in the cluster and their executives, in other words cluster executives share a common professional background and thinking (Paniccia 1998).

- Gnyawali and Srivastava (2013:5) state that organizations "with strong motivation make concerted efforts to identify innovation opportunities, devote necessary resources for innovation projects, and engage more deeply and systematically in innovation tasks, and consequently increase the likelihood of successful innovations". However, an organization's motivation could also arise out of competition impacts (Schumpeter 1934).

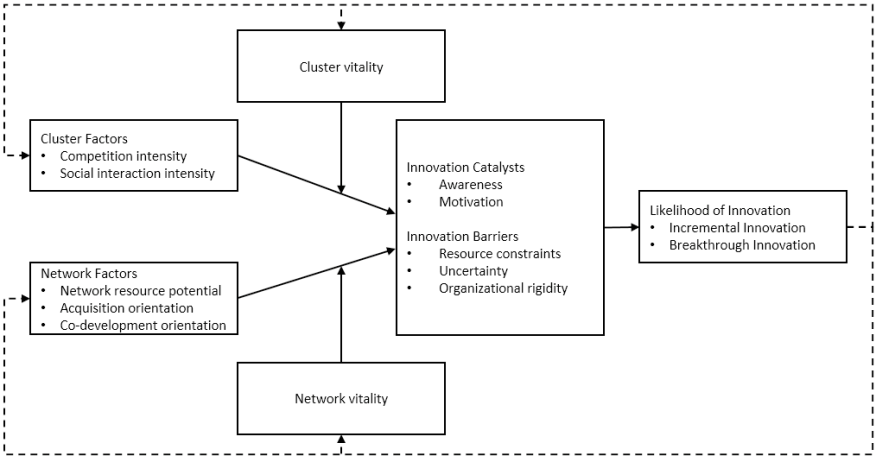
Hence, companies seek out to create relationships with other companies intending to gain access to required assets (Kogut 1988, Nohria and Garcia-Pont 1991), this was feeding the conclusion amongst researchers that organizations can be or are embedded in several, only moderately overlapping, networks (Eisenhardt and Schoonhoven 1996, Powell, Koput et al. 1996, Inkpen and Tsang 2005, Inkpen 2009).

Gnyawali and Srivastava (2013:6) reason that a cluster's key success factors (and inter-firm networks) are competition and collaboration. They also provide a 'conceptual model of cluster and network effects on innovation' (figure 1) to deliver a visibility on cluster effects on innovation, which mainly are: influencing awareness and motivation. They suggest the future output of cluster innovation

to be primarily in terms of influencing these two artefacts, reflecting on previously mentioned innovation catalysts and blockers. Both researchers continue by visualizing that the degree and nature of innovation opportunities depend on a company's inter-firm network orientation and absence of relationships cause gaps, in addition to creating competition amongst partners to access network resources and advantages (Madhavan, Gnyawali et al. 2004).

Another differentiator addressing development of innovation through clusters is the fact that companies have diverse approaches of inter-firm network orientation driven by competitive or collaborative mindsets. "Firms that enter into cooperative agreements driven by a competitive perspective would configure their networks very differently than firms that view their network from a more collaborative perspective to build and nurture mutual relationships. Accordingly, we conceptualize such network orientations as 'acquisition orientation' and 'co-development orientation' respectively", Gnyawali and Srivastava (2013:6).

Figure 1:. A conceptual model of cluster and network effects on innovation.



Source: Gnyawali and Srivastava, 2013:7, Figure 1

It must be clear that by sheer activating or accessing innovational assets a company may not generate, apply or guarantee the start of innovation. In parallel it is also required to consistently follow-up on any innovational opportunities and, in addition resolve in parallel upcoming internal organizational bottleneck situations or blockages (Ahuja and Lampert 2001). Clusters are organized differently and therefore have another approach towards delivering work in regards of resource flow and engagement, hence producing a different level of impact (Gnyawali and Srivastava 2013) than a traditional organizational approach.

As previously mentioned, Porter (1998) already suggested that competition in a cluster is an impetus for innovation, and correspondingly an available pool of mutual resources. Other researchers (Maskell 2001, Tallman, Jenkins et al. 2004) state that through informal interaction knowledge flows and as a result innovation being facilitated within a cluster, being part of a cluster opens access to knowledge and information residing in it. Critical for such innovation prospects is according to Arikan (2009) a company's breadth of collective knowledge and innovativeness. The understanding of underlying cluster mechanisms (Gnyawali and Srivastava 2013) impacting a company's innovation are relatively limited. Within the work of Porter (2000) and Chen (2007) one finds that a clusters key role is increasing a company's consciousness of technological advances and a driver for engaging in such innovation through uncertainty reduction towards innovation. Other researchers have identified that a company's cooperative or collaborative attitude contributes to their innovation (Powell, Koput et al. 1996, Ahuja 2000, Baum, Calabrese et al. 2000) and based on Ahuja's (2000) findings the size of a network amongst cluster embedded companies can be an indicator of inventiveness of the cluster. Further scientific research has identified that multiple types of resources indicate a higher level of diversity of a company's available alliance networks and therefore an enhanced capability of such a company to develop innovations (Phelps 2010, Srivastava and Gnyawali 2011). Accordingly, it can be stated that the sum of effects of cluster activity innovation, is potentially impacted (mostly indirect) by its position within the network (Bell 2005).

IV. THE PARADIGM OF OPEN INNOVATION

Knowledge is becoming increasingly transparent. Accessing knowledge or its production leads science to become more open and global. Technology intensive industries share domain knowledge by documenting it in software, simulations, and database, developing a collective knowledgebase governed and administrated by community members (Smith, Ashburner et al. 2007). Although such communities, represent flexible forms of organizational structure with seemingly substantial uncertainty, increasing numbers of researchers and practitioners start to consider such constellations as progressively important to a future information and knowledge-based economy (Powell and Snellman 2004). It is a historical fact that companies, for the sake of innovation, had to budget intensively into R&D departments. However, this approach is eroding and emerging is an open model, where organizations realized that not all valuable ideas come from inside (Chesbrough and Crowther 2006) and mainly high-technology or technology intensive indus-

tries have been regarded as relevant to open innovation concept. It is therefore a more profitable way to innovate, since it can decrease expenses, accelerate output of products to the market and increase diversity besides new valuable revenue streams for the company.

Chesbrough (2006) describes that competitive advantage originates from inbound open innovation, i.e. utilizing findings of others and suggesting that companies should not only rely on their internal R&D. Moreover, outbound open innovation proposes that companies should resist relying entirely on internal competencies to market, but should explore external organizations that are a better match to commercialize a given technology.

The definition of open innovation comes from a long tradition of researching the innovation process. Schumpeter (1934) provided a strong stimulus in this field of research with his study of assessing the entrepreneur and the entrenched incumbent company. Cohen and Levinthal (1990) described the importance of funding internal R&D with the intention of utilizing external technology, a capability they labelled, 'absorptive capacity.' Nelson and Winter (2009) provided a company's decision model to explore for innovative technology outside of its own. Business historians have defined markets for innovation to be pre-dated against the ones of increase of corporate R&D, but also often pre-dated the implementation of intellectual property law (Lamoreaux and Sokoloff 2001). The question, why companies spend money on own research, rather than apply use of external knowledge was investigated by Rosenberg (1994) and the matter of those organizations who miss to explore such external R&D may find themselves in severe competitive disadvantage (Rosenberg and Steinmueller 1988).

The open innovation method, as a substitute to traditional innovation, is of specific interest to many industries today (Wu and Lin 2001, Bonaccorsi, Giannangeli et al. 2006). While its groundwork can be connected to the concept of collective action (Olson 2009), open innovation has in the past decade emerged as a fresh, highly cultural and economic phenomenon. Based on Kuhn (2012) any new paradigm of industrial innovation requires to constitute irregularities or gaps which were not sufficiently explained in previous paradigms. In this case open innovation (Chesbrough and Crowther 2006) describes how corporate R&D divisions face challenges, when internal knowledge spillovers (initiated through internal research) do not bring expected or forecasted internal value add, remaining in repositories or licensed to other companies, which then are able to commercialize that knowledge. Evidence supporting this open innovation model were presented almost entirely from so-called 'high-technology' (technology intensive) industries (Chesbrough 2006). Subsequently, it can be stated that the basic principle of open

innovation is opening up the innovation process or "The open innovation paradigm treats research and development as an open system. Open Innovation suggests that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well", (Chesbrough, 2006:2). Huizingh (2011) writes that open innovation is not a clear cut concept and comes in many variations, which on one hand adds to the richness of the paradigm, but on the other makes further theory development more complex. Furthermore, to classify openness or to design a required framework, one has to get back to multiple sets of open innovation practices and then develop matrices distinguishing various forms of it. Dahlander and Gann (2010) highlighted that open innovation shows less a dichotomy than a continuum with changing levels of openness. Likewise, tasks that include multiple activities, i.e. inbound, outbound and merged, each of them being more or less 'open' (Gassmann and Enkel 2004).

Coming back to the original intent of this paper and looking at economic clusters, their knowledge exchange and open innovation, it can be best described as: "In the early stage of a new technology, there will be some companies or scholars with the requisite of scientific and commercialization expertise for technology exploitation", (Cooke, 2005:93).

The noticeable rise of open innovation engagements, appears to be associated with increasing the levels of collaboration (Ollila and Elmquist 2011) – like in a cluster, representing an open platform for ideas, talent and technologies and building upon the collective design and development of knowledge and products (Combe, Rajala et al. 2012). Consequently, when both drivers come together and materialize the previously discovered market potential, new companies will as a result keep a very close relationship and 'open channels' through the creation of highly innovative environments where accessibility of knowledge spillovers is made available (Cooke 2005, Chesbrough, Vanhaverbeke et al. 2006). The open innovation model requires users to be visionaries, actively and continuously exploring and creating new solutions for their own interest, working with companies pursuing knowledge spillovers from collectively-created innovations (Dahlander and Magnusson 2005). The reason why Chesbrough's early 2000 works made the open innovation model attractive was that is straight forward explained within a single term to a collection of developments and the resulting stream of further research a body (Huizingh 2011). This allowed researchers and practitioners to revisit and rethink the traditional design and process of innovation in a networking environment, and last – the timing was convenient as there was a rising economic need outsourcing, central competences, collaboration via external networking, and the internet.

V. CONCLUSION

"Under the pressure of global competition, participation in industrial clustering is important for sustainable corporate development", (Lai et al., 2014:738).

There has already been much of research on economic cluster and knowledge exchange, so to continue in that direction would be like 'scientific overkill'. But, the understanding of knowledge development and sharing through open innovation as a driving force for cluster competitiveness remains rather unclear and provides a better prospect for delivering a scientific contribution. Here are a few pints identifies leading to further research:

- One major limitation in most of the research papers (based on research done so far) is that the focus is on a single cluster of industry in stable conditions, involving several autonomous actors (Combe, Rajala et al. 2012). This results in lingering gaps in comprehending evolutionary characteristics and dynamics of the triangle: economic cluster, knowledge exchange and open innovation.
- Even if stipulated that innovation processes are well characterized through open innovation within high-tech and technology intensive industries, further research should be able to prove if this paradigm can also be applied in other industries with e.g. lower technology or more mature industries (Chesbrough and Crowther 2006).
- Additional investigation should be identifying the key roles of the open innovation paradigm in high-tech and technology-intensive, utilizing the "Triple Helix concept" of university-industry-government relationships initiated by Etzkowitz (2000), as knowledge creation and exchange is a collaborative process and "actors involved take on different roles, and knowledge is mutually exchanged rather than dispersed unidirectionally" (Mitra and Edmondson 2015).
- The role of, level of and management of trust in knowledge exchange based on the open innovation paradigm in high-tech and technology-intensive MNCs R&D departments.

The present findings of the literature review have supported all three hypothesizes as stated in the introduction: (1) knowledge in clusters is developed by organizational collaborative interaction; (2) cluster knowledge benefits from potential knowledge spillover effects; and (3) knowledge exchange in clusters is not only based on the concept of collective action, but presently very much through the open innovation concept.

To conclude, the open innovation paradigm describes a contributing process to organizational knowledge management and can sustain or even increase competitive advantage of high-tech and technology-intensive MNCs.

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LEGAL FRAMEWORK AND CONTEMPORARY TRENDS IN ASSESSMENT OF EFFECTS OF CERTAIN PROJECTS ON ENVIRONMENT

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ABSTRACT

The greatest achievements in different areas of human activities have been achieved through various projects, because of which impact on global environment has become increasingly negative. That is why developed countries in the EU and the world began to regulate environmental protection in their legislature, bringing a number of legal acts related to certain projects. Guided by this fact, the paper describes the history of origin of environment impact assessment, legal framework of assessment based on the international conventions and EU legislation and contemporary trends in the field of environment impact assessment. The emphasis is on directives on assessment of the effects of certain projects on the environment and their amendments. Considering the aim of the environment impact assessment to determine the environmental, social and health effects of certain projects performance, tendency is on constant questioning and improving instruments of legislation to reduce negative impacts on environment.

I. INTRODUCTION

The greatest achievements in the areas of human activities have been achieved through various projects. However, together with all positive effects, certain projects (common name is also the "interventions") as a permanent or temporary economic or social activity are damaging environmental stability, biodiversity, or in any other way (usually negative) make impact on the environment. (Rajković 2011, 3)Therefore, the developed countries in the EU and the world began to make the laws to regulate environmental protection, adopting a number of legal acts related to the assessment of the effects of certain projects on the environment.

Environment impact assessment is the process of evaluating the acceptability of the planned intervention (project) with respect to the environment and determination of necessary environment protection measures to be implemented in the context of preparation of the planned intervention. Usually, those are projects related to construction of infrastructure facilities (transport, energy, water), manufacturing and sports facilities, facilities for waste management, tourism and catering, shopping centers, interventions that exploit mineral resources and the like. (Rajković 2011, 5)

The aim of environment impact assessment is to determine the potential environmental, social and health impacts of implementation of a specific project. The goal is to estimate the physical, biological and socioeconomic impacts in a form that would allow a rational decision-making. (Črnjar i Črnjar 2009, 273)

Guided by this fact, the paper describes the history of origin of environment impact assessment, assessment legal framework based on international conventions and EU legislation and contemporary trends in the field of environment impact assessment.

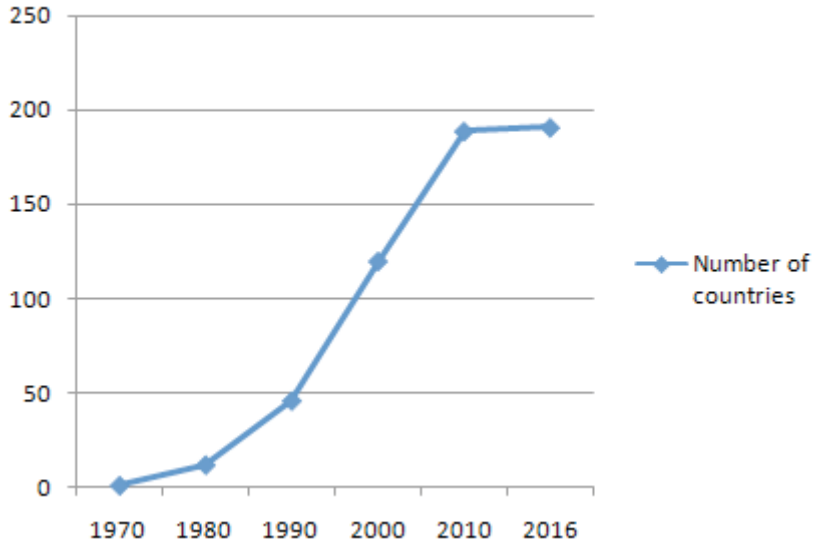
II. LEGAL FRAMEWORK FOR ASSESSMENT OF IMPACTS OF PROJECTS ON THE ENVIRONMENT

A. GENESIS OF NEED FOR REGULATION OF PROJECTS IMPACT ASSESSMENT ON THE ENVIRONMENT

The first significant legislation in this area - the Law on State policy of the US Environmental Protection was signed in 1970. The adoption of this act triggered the interest of other countries, and from 1973, this process has become a part of the environmental legislation in Canada, from 1975 in future EU countries, namely in Germany, in 1976 in France and Italy, in Luxemburg in 1978, in 1986 in the Netherlands and the United Kingdom, followed by other countries: Norway, Sweden, Finland, Japan, Australia, New Zealand. (Hodolić, i dr. 2005, 143)

The following illustration clearly shows how seriously the need for legal regulation of projects impact on the environment is understood, and more and more countries have been adopting EIA (Environment Impact Assessment) acts. (NCEA n.d.)

Figure 1.: EIA LEGISLATION FROM 1970-2016 (NCEA n.d.)



The fact that the impact assessment is a necessary instrument for the environment care and prevention of distortion and degradation of the environment was confirmed by the European Economic Commission in its second action plan for environmental protection in 1977. There the important role was played by Directive 85/377/EEC from 1985 on the analysis of the effects of certain public and private projects on the environment, which was aimed to harmonize the laws in the EU countries and to contribute to better achievement of the EU objectives in the field of environmental protection and life quality. (Hodolić, i dr. 2005, 143)

B. DEVELOPMENT OF LEGISLATION IN THE FIELD OF ASSESSMENT OF IMPACT OF PROJECTS ON THE ENVIRONMENT

EU legislation in the field of environmental protection (Environmental acquis communautaire) makes about 300 legal acts (directives, regulations and decisions), divided into eleven subsectors that represent the various spheres of environment management (Herceg 2013, 458):

1. horizontal legislation;
2. air quality;
3. waste management;
4. water quality;
5. environmental protection;
6. control of industrial pollution and risk management;
7. chemicals and genetically modified organisms;
8. noise;
9. forestry;
10. climate change and
11. civil protection.

Horizontal legislation includes environmental legislation on various issues that are included in different areas of environment, opposed to the legislation related to every single sector (e.g. air or water). It includes the integration of environmental protection in all economic sectors, strategic assessment of plans and programs, assessment of impact of projects on the environment, access to information and reporting on the implementation of directives about the environment.(Črnjar i Črnjar 2009, 418).

The following are directives of horizontal legislation on the assessment of effects of certain projects on the environment and their amendments (Environmental impact assessment of projects 2013)(Directive 2014/52/EU n.d.):

- Directive on the assessment of the effects of projects on the environment 85/377/EEC applies to those projects which may have significant effects on the environment. In this sense, the project means the execution of construction works or other installations or projects in the natural environment and landscape. (Council directive 85/337/EEC n.d.)The EIA Directive 85/377/EEC of 1985 was amended three times, in 1997, in 2003 and in 2009:
  - Directive 97/11/EC brought the Directive in line with the Espoo Convention on EIA in a Transboundary Context. The Directive of 1997 widened the scope of the EIA Directive by increasing the types of projects covered, and the number of projects requiring mandatory environment impact assessment (Annex I). It also provided for new screening arrangements, including new screening criteria (at Annex III) for Annex II projects, and established minimum information requirements.
  - Directive 2003/35/EC was seeking to align the provisions on public participation with the Aarhus Convention on public participation in decision-making and access to justice in environmental matters.
  - Directive 2009/31/EC amended the Annexes I and II of the EIA Directive, by adding projects related to the transport, capture and storage of carbon dioxide (CO_2).

- Directive 2011/92/EU of the European Parliament and the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, as amended, known as the "EIA" (environmental impact assessment) Directive, requires that an environmental assessment to be carried out by the competent national authority for certain projects which are likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location, before development consent is given. The projects may be proposed by a public or private person.
- Directive 2014/52/EU of the European Parliament and the Council from April 16th 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. In order to strengthen the quality of the process of environment impact assessment, to harmonize this process with the principles of quality regulation and improve connections and synergies with other legislation and policies of the Union as well as strategies and policies that have been developed by Member States in the areas of national jurisdiction, it was necessary to amend the previous Directive from 2011.

Besides the above mentioned directives, the legal framework for environmental impact assessment includes international conventions because of which the directives have been amended: the Espoo 1991, Aarhus 1998, Kiev 2003.

In 1991, in Espoo, Finland, the Convention on Environmental Impact Assessment in a Transboundary Context was adopted. The Convention sets out obligation of the parties to assess the impact of certain activities on the environment at an early stage of planning. It also obliges states to notify and consult each other in all major projects being under consideration which may have significant environmental impact across national borders. By convention, the neighboring countries have the right to participate in the environmental impact assessment if the planned project in one country can have an impact on the environment across its borders (Herceg 2013, 399)

Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, was adopted in Aarhus, Denmark, in 1998. The Aarhus Convention is an international agreement which defines common standards of the public's right to information, participation and access to justice. The aim was to contribute to protection of the rights of every person in present and future generations to live in the environment suitable for their health and well-being. (Herceg 2013, 400)

Protocol on Strategic Environmental Assessment with the Convention on Environmental Impact Assessment in a Transboundary Context, was adopted in

Kiev 2003. It aims to provide a high level of environmental protection, including health. Parties are required to provide a procedure that includes public participation. (Herceg 2013, 400)

III. CONTEMPORARY TRENDS IN THE FIELD OF ENVIRONMENT IMPACT ASSESSMENT

When we look in which direction the legislation on environmental impact assessment has been developing, we can see that each new modification of the directive has included a new element to which attention should be paid. Thus, after adoption of the original Directive 85/377/EEC on the assessment of the effects of certain public and private projects on the environment, in 1997 the need for its modification due to compliance with the provisions of the Espoo Convention arose. Then the area of operation of the directive was extended to the environmental impact assessment across national borders. The next step was adoption of common standards on the public's right to information, participation and access to justice with the adoption of the Aarhus Convention, and therefore the directive was amended again in 2003. With the third amendment, in 2009 the projects related to transportation, capture and storage of carbon dioxide were added into the directive.

After three amendments of the original Directive, by Directive 2011/92/EU in 2011, the EU legislation harmonized the principles for assessing the impact of projects on the environment by introducing minimum requirements with regard to the type of projects that are estimated, the most important obligations of the project coordinators, content of evaluation and participation of competent authorities and the public. It contributes to a high level of environmental protection and human health.

In order to strengthen the quality of the process of environmental impact assessment, to harmonize it with the principles of quality regulation and improve connections and synergies with other legislation and policies of the Union as well as with strategies and policies that have been developed by Member States in areas of national jurisdiction, it was necessary to amend the previous Directive from 2011, and in 2014, Directive 2014/52/EU which amends Directive 2011/92/EU on the assessment of effects of certain public and private projects on the environment was adopted.

Furthermore, current trends in environmental impact assessment are increasingly emphasizing the need to include some other elements in assessment procedures and decision-making process. In addition to the earlier inclusion of health

and social impacts in environmental assessment, some even more important elements that have been emphasized in recent decade are the following(Directive 2014/52/EU n.d.):

- resource efficiency and sustainability,
- conservation of biological diversity,
- climate changes,
- risks of accidents and disasters and others.

More extensive studies of effectiveness and sustainability of resources have been included in the Directive 2011/92/EU review.

There is also a need to assess significant adverse impacts of projects on biodiversity, in order to avoid or reduce their environmental impact to a minimum.

Climate changes will continue to cause harm to the environment and endanger economic development. In this respect, it is appropriate to assess the impact of projects on climate (e.g. emissions of greenhouse gases) and their susceptibility to climate changes.

In order to ensure a high level of environmental protection, it is necessary to take precautions in specific projects that, due to their susceptibility to major accidents and/or natural disasters (such as floods, sea level rise, earthquakes), are likely to have significant adverse impacts on the environment. For such projects it is important to consider their vulnerability (exposure and resistance) to major accidents and/or disasters, the risk of such accidents or disasters and indicators for the likelihood of significant adverse impacts on the environment.

We can see that an environmental impact assessment has a significant effect on numerous projects or their modifications. In addition to positive effects such as the identification of key environmental issues, higher standards of mitigation of adverse consequences, making right decisions, it has its adverse effects. EIA Directive applies only to actions, without setting new environmental standards and it does not include stricter financial requirements. Application of environment impact assessment depends on implementation of its principles into national law. In addition, the environment impact assessment of individual projects is not enough, there is no alternative locations or methods, the dynamics of the environment and development in general is not processed, and the cumulative effects are ignored as well. (Črnjar i Črnjar 2009, 277).

Therefore, since 1990, Strategic Environmental Assessment has been introduced and increasingly applied, and it can also be pointed out as a trend in the environmental impact assessment because it is in a certain way a complement to the environmental impact assessment and it is always current.

Strategic environmental assessment is a procedure that evaluates possible environmental impacts made by strategies, plans and programs, and their alternatives, proposed measures necessary to combat negative impacts, as well as the program of

monitoring the impact. Primary purpose is application of process of ensuring sustainable development at a higher level of planning. In the world, it has been applied in the last ten years, and the EU member states, in accordance with the provisions of the Strategic Environmental Assessment (SEA) Directive 2001/42/EC from 2001, have been obliged to apply it since 2004. (CARDS2003 2003, 3).

SEA Directive is an extension of EIA directive that raises individual projects on the level of plan and program. The difference between these two directives is that SEA Directive is applied only in public programs which make political decision makers directly responsible for a negative impact on the environment. (Črnjar i Črnjar 2009, 278)

Therefore we can say that the EIA is an administrative instrument that applies to the particular project and represents a lower level of decision-making, and SEA is an advisory instrument of higher level of decision-making. (Herceg 2013, 574)

In both cases of the environmental impact assessment, it is about procedure to ensure that in the decision on the acceptance of an intervention, plan, program or project, their possible impacts on the environment should be considered.

IV. CONCLUSION

With the growing concern for the environment and the need for sustainable development, impact assessment of certain projects on the environment has been developed into an instrument of its protection, and which a number of countries have included in their legislation.

In the EU a significant role was played by Directive 85/377/EEC on analysis of effects of certain public and private projects on the environment, which is aimed to harmonize the laws in the EU and contribute to better achieving the objectives of the EU in the field of environmental protection and quality of life.

The paper gives emphasis to directives that assess the effects of certain projects and their changes because the trend is a constant review and improvement of the instruments of legislation with the aim to reduce negative impact on the environment.

Perceiving in which direction legislation on environmental impact assessment has been developing, we can see that each new change of certain legal act includes a new element in the environmental impact assessment.

It can be concluded that the contemporary trends in the assessment of the effects of certain projects on the environment are moving in the direction of inclusion of a growing number of important elements in the procedures of environmental impact assessment and decision-making processes.

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KEY RISK INDICATORS AS MEANS FOR FINANCIAL AND OPERATIONAL RISKS IDENTIFICATION IN THE PURCHASE PROCESS

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ABSTRACT

With the corporate world's constant advancement, companies are required to adjust their business operations on an ongoing basis. Thereby, companies are in continuous need to identify and respond to risks threatening the achievement of their short-term and long-term objectives. One means which helps companies doing so are key risk indicators. Key risk indicators are a measure of internal or external events that may impact a company in future. By providing information about potentially emerging risks or unfavorable trends in existing risks, they help companies to be more agile in intervening and therefore be less vulnerable. Risks in the purchase process pose a significant liability to companies as this process is of decisive importance to the company's success. If defined precisely and applied properly, key risk indicators help companies identify and measure financial and operational risks and variations of risk in the purchase process at an early stage.

I. INTRODUCTION

The corporate world has been in constant change ever since, requiring companies to constantly adjust their business activities. In order to succeed in doing so, companies need to recognize and counteract events endangering the achievement of their goals. Thus, many companies around the world have implemented risk management activities by which they identify risks impacting their company from outside or inside on the achievement of corporate goals, measure and evaluate the strength of identified risks, and find solutions to limit or even prevent risk before it materializes.

Risks can be categorized in different ways. They may arise internally from activities within a company, but may also arise externally and impact a company from the outside. Also, risks may be allocated to different functions, departments, hierarchy levels, processes, or activities of a company. Moreover, risks may be divided among their area of impact (financial, operations, compliance, etc.) (Illetschke et al. 2014a, 17-19, Kendall 1997a, 19-47, Parker, 1995).

In order to find appropriate countermeasures, risks need to be identified at first. This needs to be done thoroughly to ensure that all significant risks endangering companies' goals are discovered. In a second step, identified risks need to be measured. This should be done in a way that allows companies to effectively determine suitable risk response methods (Illetschke et al. 2014c, 55-136, Vaughan 1997b, 34-38).

Both the identification and the measurement represent challenging tasks. One means assisting companies in the identification and measurement of risks which has been discussed in theory over the last years are key risk indicators (short: KRIs). Properly implemented, KRIs measure events with a future impact on a company and present findings in a condensed form, usually as a fraction. KRIs may be applied to a wide range of application fields. However, in order to determine suitable KRIs a solid cause-effect-relationship between the indicator and the factual risk needs to be present (Beasley et al. 2010a, 2-5).

The paper at hand features an in-depth academic elaboration on how KRIs may be implemented in practice and is based on financial and operational risks in a standardized purchase process. Thereby, this work tries to answer the core question as to how far KPIs represent an effective means to lift risk identification to the next level.

In the next chapter, risk in general and risk management in specific are defined an elaborated on in detail. This is followed by a discussion on KRIs and their practical applicability. The subsequent chapter covers a description of a standard-

ized purchase process as a well as the single steps necessary for the practical implementation of KRIs.

II. RISK AND RISK MANAGEMENT

A. History

A company and consequently its objectives are influenced by its internal and external factors. All of these bear either a risks which has to be responded to or opportunities which should be exploited. Thus, risk is the possibility of an event occurring which will impact previously set objectives. Risk is the downside or negative impact, whereas an upside or positive impact is considered as an opportunity (Vaughan 1997c, 53-72).

Risk management is defined as "a process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives" (Institute of Internal Auditors 2013, 1-8). Consequently, the strategic objectives announced by the management or the board of directors of a company represent the starting point for the risk management process. As the outcome of future corporate activities is uncertain, the risk of not achieving set objectives is inherently given.

Risk management in its very simplest form has been existing since the beginning of manhood. Already in ancient times, people had to consider trade-offs between risk and return. These trade-offs were not based on mathematical or statistical probability calculations, but on experience and faith. Still, people sought to improve their knowledge to obtain better results, i.e. more return for the same amount of risk, or the same return for less risk. As time passed by, risk techniques became more scientific and sophisticated by taking into account probabilities and experience gained from previous observation. Today's risk management is based on this long-lasting development and has finally established its first, widely accepted frameworks for enterprise risk management during the 1990's. In 1995, one of the first standards, the Combined Australian and New Zealand Standards AS/NZS 4360 was published, containing a modern risk management approach for larger and smaller companies. It was revised in 1999 and 2004 to satisfy the most current requirements. Already three years before, the Committee of Sponsoring Organizations of the Treadway Commission, COSO, had released an integrated framework for internal control which mainly focused on internal controls, but also accounted for risk to a considerable amount. In 2004, this framework was incorporated in the new, enhanced version Enterprise Risk Management – Integrated Framework which was designed to combine existing concepts within a framework

with commonly accepted definitions. Another framework was developed by the International Organization for Standardization, the ISO 31000, which was published in 2009 and which superseded the AS/NZS 4360 (Illetschke et al. 2014b, 23-54). It provides, to all kind of directors, managers, or auditors, guidelines and principles how to achieve objectives, how to improve the identification of risks, and how to treat them effectively. As these frameworks are generic in order to be applied by companies of all sectors, different versions for specific business sectors as the Guidelines to the Assessment of IT Risk emerged. All of these latest standards contribute considerably to the overall understanding of risk management in practice nowadays (Parker, 1995; Vaughan 1997a, 27-30).

B. Risk management in practice

i. Risk management framework

Since companies face a number of risks by trying to achieve their objectives, they initially have to establish a risk culture which specifies the attitude and approach to risks. Risk culture provides the guiding conditions that risk management has to account for. As risk management is a means to support companies to achieve their objectives, risk culture should align with the overall culture of companies. When the objective defines where companies want to go, then culture describes how companies will go there and how things are done in order to get there. This includes components as corporate values, the companies' representation in public, or the treatment of staff. However, risk culture is limited by risk capacity, the amount of risk companies are able to accept, and risk appetite, the amount of risk companies are willing to accept. Amongst others, these three factors form the risk management framework companies operate in and build the basis for all further steps in the risk management process (Vanini 2012a, 39-81).

ii. Risk management process

The risk management process usually follows a cyclic approach with several steps (Illetschke et al. 2014c, 55-136, Vaughan 1997b, 34-38). These are described in following. In practice, a combination of these is usually found.

a. Risk identification

The identification of risks should be performed by a structured and systematic approach in order to ensure that all significant risks are addressed. Therefore, it is advisable to establish a risk register with details about all significant risks. This register is used as guiding document throughout the complete risk management process. By creating such a structured document, companies are forced to analyze risks

in regard to their origins, characteristics, and other features. Thereby, the company's strategy, objectives, culture, and environment play a decisive role, as these set the tone among involved parties for what is considered relevant or significant.

When companies set objectives and plan operations, risks consideration is an inherent step in management's actions. Therefore, the process or setting up a formalized risk management needs to fulfill requirements as clear planning, strong support from the board, adequate resourcing, good communication, recording of actions and results, as well as involvement of risk management specialists. Periodic reviews of the internal and external environment the company is active in may represent a sound basis for risk identification. Checklists and benchmarking are useful tools to enhance the degree of formalism and to ensure that all significant steps during risk identification will be covered. Scenario or process analyses may represent another methodology to help a company identify its risks in a structured approach (Vaughan 1997d, 106-127).

b. Risk analysis and evaluation

The second step of the risk management process is the analysis and evaluation of previously identified risks. Because of its complexity, it is helpful to divide this part into five sub-steps:

Risk classification

Depending on the amount or risks documented in the risk register, risks may be classified and divided among various groups. A universal way of classification does not exist. Instead, risk groups should be tailored to the best purpose of the company. Possible distinctions can be made on the nature of risk, the responsible company department, or any other aspects.

Risk analysis

An extensive risk analysis is performed to explore identified risks in even more detail. This step may be performed to gain an even deeper understanding before the risk is evaluated in later steps and may become handy, especially when interdependencies between single risks are expected.

Risk criteria

Appropriate risk criteria need to be defined for a clear and continuous understanding and evaluation of risks. The most common criteria are likelihood and impact. Likelihood indicates the probability or the frequency of a given risk. It is assumed to be rather stable within a given time frame. The actual affect to a company

caused by a specific risk is measured by the impact. Risk may also be measured by vulnerability indicating how sensitive a company is to a risk. This sensitivity usually depends on the company's state of readiness, agility, and adaptability. Volatility, as another risk criterion, expresses the variance in probability that a certain risk occurs. Velocity takes into account the time a company disposes of from the first warning of a risk until the impact. Yet, interdependency takes place when two or more risks materialize at the same time and change the resulting impact on the company. Correlation, as another risk criterion, refers to a change of one risk, if another risk occurs.

Risk measurement

Although theory allows the usage of a range of criteria, most companies in practice cope with only two criteria (impact and likelihood) to evaluate their risks for the most part. Having chosen appropriate criteria, the extent of risks needs to be determined on an individual basis in accordance with the chosen criteria. There are multiple ways to express the extent of the chosen criteria. In many companies it is common to rate impact in qualitative terms (e.g. problematic, disruptive, or catastrophic) or by numbers (e.g. 1 = low impact; 5 = high impact). The extent of the scale (i.e. the amount of stages) is thereby in the discretion of the company. Similarly, likelihood may be scaled in qualitative terms (e.g. unlikely, possible, or likely) or in quantitative terms (e.g. as percentage of probability). Constantly rating risk criteria in quantitative terms enables companies to determine a specific risk severity across all risk criteria and express each risk with a specific figure. However, a purely numerical approach might tend to oversimplify the reality, leading to underestimations of risks (Beaver 1995, 197-217, Hindy 1995, 107-138).

In theory, a range of other deterministic and stochastic methods for risk measurement are discussed. While the former covers analysis by which best case, worse case, or most likely case scenarios are determined, the latter covers diverse simulations (e.g. Monte Carlo simulations) (Vanini 2012b, 157-208). In practice, however, these approaches are rather rare and found mostly at financial institutions.

When it comes to applying these methods, historic data or experience from the past may have a large impact on how risks are evaluated.

Risk prioritization

Once measured, risks should be ranked as far as possible to prioritize subsequent risk response activities. It may turn out helpful to display key risks in a risk map, e.g. with impact one axis and likelihood on the other. Risks that are near the zero point are of less priority than those that are far from that point with either a high likelihood or impact, or even both (Nicholsen and Banker 2013b, 86-100).

c. Risk response

After risks have been identified, measured, and prioritized, appropriate risk responses need to be determined for each risk. Thereby, the response represents any action taken to modify identified risks. The type of risk response should be linked to the previously set risk culture and risk appetite and should account for limitations set by the risk capacity. A company may therefore op to be rather risk-averse, risk-neutral. or risk-seeking. The more risk a company is willing to take, the higher is its potential return.

Usually, there are four types of risk response a company may choose from to address risks:

Risk avoidance

Companies may opt to terminate the activity or withdraw from the situation which causes the risk. This option may be advisable if costs of treatment of a risk are high and risk consequences would be very harmful for the company.

Risk mitigation

Implementing internal controls mitigate risks by reducing either their likelihood, their impact, or both. Preventative controls (e.g. access controls to corporate facilities) reduce the likelihood. Their aim is to narrow down the probability that a risk event occurs. Detective controls (e.g. error reports or inventory checks) detect the occurrence of risks and therefore reduce the impact of risks. Directive controls (e.g. employee training and process manuals) attempt to specific behavior and handling and therefore reduce likelihood as well as impact. When risk events already took place, corrective controls (try to) reduce the impact as they attempt to restore the normal situation. Irrespective of the kind of control, a deep understanding of risk is necessary to implement suited controls and achieve the intended effect on risks.

Risk transfer

Risks (or parts of risks) may be transferred to a third party (e.g. in form of an insurance). In rare cases, risk can also be shared (although not completely transferred) in form of a joint venture with one or several other companies.

Risk acceptance

If risk is completely understood and considered to be acceptable, the company may decide to accept it as it is. Most often, tolerated risks have a small impact or likelihood and treatment costs would exceed resulting benefits.

To properly manage all chosen risk responses, response plans should be set up. These contain all defined actions for all identified risks in a structured and prioritized manner. Thereby, they form the basis for all further response activities and deliver a detailed overview of the tasks to be done and the persons in charge (Vanini 2012c, 223-248).

d. Risk reporting

Proper reporting provides to management and the board of directors information about the effectiveness of risk management. Ideally, reporting is integrated into daily routine activities and takes into account the need of internal and external stakeholders. Thereby, extent of reporting depends on factors as the size of the company, the extent of risk management activities, the extent of stakeholders' needs (Vanini 2012c, 223-248, Nicholsen and Banker 2013c, 115-117).

e. Regular review

As the risk management process works in an environment with altering conditions, situations, and objectives, it needs to be reviewed periodically in order to achieve continuous improvement (Illetschke et al. 2014d, 152-160, Kendall 1997b, 211-212). The periodic review follows three major goals to preserve the effective functioning of the risk management process and thereby the success of the company itself:

1. The review should seek to identify and repair weaknesses in the risk management process. Therefore, it needs to verify if the process is suitably embedded into the company' structures and activities, if sub-steps are applied correctly, and if measures are working in an effective and appropriate way.
2. The review should verify if the company's objectives are accomplished. Any deviation from intended objectives means a failure of risk management because the process is designed to ensure that objectives are reached.
3. The review should identify any changes in the company's objectives and environments. These should be accounted for in the risk management process.

Successfully implementing a risk management process represents a complex task and requires from companies a deep understanding of its internal structures and processes as well as of its external environment. Because of this complexity, adequate resources and a considerable amount of effort and attention must be attributed to the implementation and maintenance of a risk management process. Thereby, special attention needs to be paid to risk identification and risk measurement as these early stages of the risk management process represent the basis for all later risk management steps (Nicholsen and Banker 2013a, 72-117).

III. KEY RISK INDICATORS

One approach of identifying and measuring arising risks or changes in existing risks which has become rather popular over the last years involves the use of key risk indicators (short: KRIs). KRIs represent a form of ratio measuring events with a future impact on the company (Matz 2008, 39-52). Although the impact may be both positive or negative, it is usually associated with negative aspects.

KRIs measure the degree of risk of a chosen subject matter at a given point in time. They can be expressed in numerical terms as absolute or relative number, but may also take the form of nominal values (e.g. "yes" or "no"). Optimally, the results provided by the KRIs are compared by companies with target values representing the company's expectations. KRIs may be used for both risk identification and risk evaluation at the same time. While KRIs call a company's attention to unusual states in monitored subject matters, they also visualize the extent of the unusualness by aligning the monitored subject matter with a (mostly numerical) figure and thereby expresses the severity of risk.

In contrast to key performance indicators (short: KPIs) which are usually backwards-oriented as they measure past events, KRIs are forwards-oriented as they provide an indication about future events. In practice, KRIs are often found in combination with KPIs. However, because of the fact that KPIs measure the impact of risks that have already materialized, a superior usage of KRIs is preferable during risk identification.

The key advantage of using KRIs for risk identification purposes is the comparably early recognition of potential risks. By identifying and measuring relevant trigger events which provide information about potential risks, the company is more agile and therefore less vulnerable as it can intervene much earlier. Therefore, the final impact can be reduced when action is taken immediately after the trigger event has occurred and before the risk materializes (Beasley et al. 2010a, 2-5; Kim and Won 2011, 97-115; Scandizzo 2005, 231–256).

According to Nicholsen and Banker (2013d, 131-141), key risk indicators can take one of the four following forms:

- **Challenge indicators** observe the root cause and inform if trigger events have already occurred, encouraging the company to react.
- **Action indicators** state if risk reactions are implemented and function in an appropriate way.
- **Health indicators** prove whether the risk event affected the company or whether the reaction could avoid the event to harm the company.

- **Risk incident indicators** express the final impact of the risk event. These indicators help the company to take the right actions at the right time in order to enable a reduction of impact.

Provided that target values have been defined previously, the status or trend indicated by KRI measurements can be expressed with colors (e.g. with red, yellow, or green). In order to be able to rely on these indications, it is particularly important for companies to involve during the process of developing KRIs those employees which regularly deal with the subject matter holding the risk. To foster a proper functioning, KRIs should fulfill several quality requirements (Beasley et al. 2010b, 5-7). They should:

1. be based on authoritative standards or benchmarks
2. be developed consistently across the company
3. provide an unambiguous and easy-to-grasp picture of what is happening
4. facilitate measurable comparisons across the company over time
5. enable the measurement of the performance of risk owners
6. be designed and implemented in a cost-effective manner

IV. STANDARD PURCHASE PROCESS

Applying KRIs in practice represents a challenging task and is connected with a range of steps to be taken. To discuss these steps in specific, the introduction of KRIs is exemplified by a standardized purchase process. In this context, the purchase process is of particular importance due to its early position in companies' value chains and its implications to other processes.

In a standard setup, the highest level of the purchase process covers, but is not limited to the following steps:

- Master Data Administration
- Purchase Requisition
- Purchase Order
- Receipt of goods
- Receipt of invoice
- Payment

When a company first places an orders for a specific good, vendors providing this good need to be stepped in contact with. If negotiations between the vendor and the purchase department of the company turn out to be successful and a business relationship is agreed upon, a framework agreement/contract may be issued which documents all significant terms of agreement. Based on this agreement, vendor master data relevant for business activities needs to be recorded by the pur-

chase department of the company. Data may include general contact data as name, address, phone numbers, but also financial data as bank account information, discounts, incoterms, terms of sales, terms of delivery, or any other information fixed in a framework agreement with the vendor. Once the demand for the vendor's product becomes urgent, the company will then issue a purchase requisition which may, depending on the exact course of process, be approved by one or several line managers. Upon approval, the purchase requisition is forwarded to the company's purchase department which will place an order with the vendor based on information provided in the purchase requisition. The vendor will then deliver products as ordered. The goods will be received and recorded, e.g. by the logistics department of the company. The vendor will issue an invoice for the order to the finance department of the company where it is recorded and scheduled for payment. Once the invoice's due date is reached (and approval for payment is provided), payment to the vendor is initiated, e.g. by the finance or the treasury department (Mindach 1997, 44-54; Kluck 2002, 53-56; Meyer and Fehr 2004, 78-78).

Depending on the nature of the company, its industry, its country of origin, its size, or any other variable, the process may vary in its form and extent.

V. KRI DEVELOPMENT

Several approaches are discussed in theory about how to set up appropriate KRIs in practice (e.g. Matruglio and Tymmons 2014). Although different in detail, most approaches feature a multi-stage process and cover at least the following steps:

- Identification of risk
- Understanding of risk
- Definition of trigger events
- Development of KRIs

The identification of risk is usually assumed as starting point. As discussed above, risks are considered as events affecting companies in their efforts to achieve set objectives. Consequently, risks will always need to be linked to company's objectives. Once risks are identified, they need to be understood thoroughly. Thereby, a deeper understanding about the cause of the risk is gained. Logical connections of single corporate activities are made obvious and events triggering the risk are identified. As this task is rather challenging, it may be advisable to break single risks down into sub-risks before trigger events are identified.

The trigger events should then be considered as what is to be measured by KRIs. Thereby, KRIs need to describe the chosen trigger events as precisely as pos-

sible. The amount, composition, and complexity of chosen KRIs should therefore not be determined globally, but set in a way which maximize expressiveness.

The single steps of the aforementioned purchase process bear certain internal risks which endanger the successful completion of the process. These financial risks represent threats which endanger the integrity of the financial reporting of companies. A range of examples for these financial risks are listed below. As discussed, for some risks it is of advantage to break them down into sub-risks beforehand.

Table 1.: INTERNAL RISKS

Risk Name	Sub-Risk Name	Process Step
Incorrect/incomplete vendor master data	Inappropriate recording of new vendor master data	Master Data Administration
	Incorrect/incomplete recording of existing vendor master data	Master Data Administration
Incorrect/incomplete purchasing	Unauthorized contracts	Purchase Orders
	Inappropriate purchases	Purchase Orders
Incorrect/incomplete recording of goods received	-	Goods Received
Incorrect/incomplete recording of invoices	-	Invoices
Incorrect/unauthorized payments	-	Payments

Source: Research results

Apart from internal, financial risks prevailing in the purchase process, there are other risks existing which are of external nature and may be allocated to the purchase area as well. These operational risks represent threats which may not necessarily sacrifice the integrity of financial reporting, but make cause severe effects on companies' turnover and/or profit. A selection of external, operational risks is shown below. In contrast to internal risks, external risks are not allocated to any (internal) process steps.

Table 2.: External RISKS

Risk Name	Sub-Risk Name	Process Step
Key vendor leaves the market	Key vendor is acquired by an investor/competitor	-
	Key vendor faces solvency problems or goes bankrupt	
Increasing raw material prices	-	-
Sacrificed supply of raw materials	Strikes endanger proper supply of materials from vendor	-
	Delivery bottlenecks due to logistics limitations	-

Source: Research results

Both kinds of risk listed above arise from experience in the practical field and may deliver an exemplary overview of significant risks allocable to the purchase process. However, the list does not provide a complete overview of all risks in the purchase process. Nor is it ranked or prioritized in any way.

For all identified (sub-)risks, risks descriptions may be of help to gain a deeper understanding. Based on this understanding, trigger events and corresponding KRIs are identified. These are shown below, split into KRIs for internal and external risks. For simplicity reasons, only challenge indicators are considered in this example.

Table 3.: KRIs for internal Risks

Risk Name	Sub-Risk Name	Trigger Events	KRIs
Incorrect/ incomplete vendor master data	Inappropriate recording of new vendor master data	Accounting guidelines are missing or inappropriate, vendors are not correctly recorded	Existence of guidelines in regard to vendor master data Amount of one-time vendors/total amount of vendors
	Incorrect/ incomplete recording of existing vendor master data	Alternations to vendor master data is not performed by purchase department, vendor contracts are not authorized or signed, inactive vendors are not deactivated	Amount of vendor master data changes not performed by purchase department Amount of signed contracts/amount of new contract entries in IT system Amount of inactive vendors in master data
Incorrect/ incomplete purchasing	Unauthorized contracts	Segregation of duties is missing, contracts are not verified by second person	Existence of guidelines for delegation of authority Amount of vendor contracts signed by only one person/total amount of vendor contracts
	Inappropriate purchases	Missing stock surveillance, purchases are performed by personnel outside of purchase department	Amount of orders placed by purchase department/total amount of placed orders Amount of purchases for material x when stock level is above repurchase-level

Risk Name	Sub-Risk Name	Trigger Events	KRIs
Incorrect/ incomplete recording of goods received	-	Logistics personnel is not sufficiently skilled, responsibilities are not clearly aligned, personnel outside of logistics department records incoming goods	Amount of trainings for inbound logistics personnel Existence of organisational charts and process flows for inbound logistic department Amount of goods receipt recordings by personnel not part of inbound logistics department/total amount of good receipt recordings Amount of orders placed and goods receipt recorded by the same employee
Incorrect/ incomplete recording of invoices	-	Invoices are recorded without reference to a purchase order, invoice are posted to the wrong posting periods, invoiced are recorded multiple times	Amount of received invoices without order reference/total amount of invoices Amount of received invoices/amount of placed orders Amount of received invoices/amount of goods receipt recordings Amount of received invoices with missing order number Amount of employees administrating posting periods in IT system Amount of recurring invoices/total amount of invoices
Incorrect/ unauthorized payments	-	Payments are unauthorized, payments are performed by personnel outside of finance/treasury department, responsibilities are not clearly aligned, system authorizations to perform payments are too extensive	Amount of payments authorized by only one employee Existence of organisational charts and process flows for finance/treasury department Amount of employees being able to initiate payments in IT Systems Amount of payments initiated by personnel not part of finance/ treasury department

Source: Research results

Table 4.: KRIs for EXternal Risks

Risk Name	Sub-Risk Name	Trigger Events	KRIs
Key vendor leaves the market	Key vendor is acquired by an investor/ competitor	Key vendor shows an outstanding financial performance, holds a high credit rating, and/ or has a comparably high market value	Earnings per share over of key vendor Share price development of key vendor Market value/book value of key vendors Credit rating of key vendor
	Key vendor faces solvency problems or goes bankrupt	Turnover of key vendor is decreasing, profit of key vendor is negative, credit rating of key vendor is declining, key vendor's quality decreases	Turnover of key vendor Profit of key vendor Profit margin of key vendor Asset turnover of key vendor Scrap rate of delivered goods of key vendor
Increasing raw material prices	-	Own purchases are concentrated among few vendors creating dependencies, key vendor obtains monopolistic advantage	Purchase costs arising for purchases from vendor for raw material x/total purchase costs for raw material x Turnover of key vendor/ total market volume Raw material price of key vendor/average raw material price of key vendor's industry
Sacrificed supply of raw materials	Strikes endanger proper supply of materials from vendor	Employees did not receive salary increases over recent years, industry is prone to regular strikes due to strong labour union activism	Amount of upward adjustments in wage levels over last three years Amount of strikes in relevant industry over last three years Amount of members of relevant labour unions Amount of own employees organised in labour unions
	Delivery bottlenecks due to logistics limitations	Unfavourable weather conditions extend delivery time, streets/ waterways on delivery route are closed for/ restricted in usage	Degrees of temperate for locations on relevant delivery routes Existence of weather warning for locations on relevant delivery routes Existence of traffic reports for streets/ waterways on relevant delivery routes

Source: Research results

In order to harness the full potential of KRIs, it is wise not only to capture them in irregular intervals. Instead, the process of applying KRIs should follow a cyclic approach. Once KRIs are defined, target values should be determined for comparisons. Also, it should be determined when (i.e. in what intervals) data for the calculation of KRIs is captured as well as how and by whom this is done. While some data may be present in internal recordings (e.g. as part of accounting records), other pieces of data may need to be retrieved externally. Data privacy issues may restrict the availability of data and therefore should be considered during the implementation of KRIs. Although not mandatory, it may be efficient to make use of a software solution to capture necessary data and/or to calculate KRIs. Moreover, it should be clear to all involved parties what activities need to be performed when KRIs report a risk to arise or to aggravate. In regular intervals, KRIs should also be revised for quality reasons.

VI. CONCLUSION

As shown, KRIs may be an effective means to identify and measure financial and operational risk and yield significant benefits during the risk management process. Nonetheless, successfully implementing KRIs requires from companies a thorough understanding of risks and trigger events. If this understanding is missing or not present sufficiently, detailed analyses may be necessary. Also, using KRIs require a certain extent of stability in companies' objectives in order to keep the need for adjustments to the KRIs at a minimum level. Finding suitable KRIs represents a challenging task. Even with best effort, identifying and measuring risk with KRIs will remain an imprecise practice as KRIs will only be a form of summery. Thus, risk may materialize even in areas which are monitored with sound KRIs. Further research may cover case studies about how to apply KRIs in certain industries or how to establish KRIs in other processes.

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HOW STRONG IS THE NEXUS BETWEEN BUSINESS CYCLES AND ECONOMIC GROWTH? EVIDENCE FROM EUROPEAN COUNTRIES

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ABSTRACT

The ambiguity of the nexus between business cycles and economic growth is examined. The recent recession increased the interest in examining that relation and its implication for economic policy. This paper will offer empirical identification of the nexus in question using econometric methodology. The results will enable better understanding of business cycles and economic growth tangle and contribute to economic growth and business cycles theory. The data will provide solid grounds and base for further research of this topic, as well as policy recommendations.

I. INTRODUCTION

There has been great debate among economists as to which are the economic relations to the behavior of business cycles. This paper explores the nexus between business cycles and economic growth. Business cycle is a simple concept which can be explained as the "ups and downs" in economic activity with reciprocal periods of expansion or recession. For the past decade a lot of academics have been exploring the characteristics and dynamics of business cycles. As a result, the literature on business cycles is extensive but none of the results of the researches conducted came up to be an agreeable outcome in the academic community which would explain the economic influences of their fluctuations. Business cycles and economic growth have been observed as two different and uncorrelated phenomena, which we will attempt to confute in this research.

Advances in economic theory and related software applications have provided economists with a new set of tools and technology adequate to investigate economic related issues (Cooley and Prescott (1995)). In this paper empirical evidence that significantly link business cycles and economic growth is presented on a sample of 46 European countries. It is increasingly evident that the progress of new software applications and methodology will continue to be of a fundamental importance for having a good understanding of the cyclical situation of the economy (Mazzi and Scocco (2003)). Granger causality test will be used to examine the causality between the cycle and growth, as Škare (2014) did in his model.

The main goal of this study is to identify and determine with the appropriate methodology the nexus between the behavior of business cycles and economic growth. Essentially, this research is made as an attempt to explain the nexus in order to be able to predict future movements of economic activity. In addition, it will provide good grounds for further research. The core question is how high is the correlation and casualty between business cycles and economic growth? In which European countries is higher/or lower and what do these countries have in common that we can link such similar behavior? To compare the results for different economies, we will investigate available data in the period 1969-2014 on the sample of GDP rates of 46 European countries.

The paper is structured as follows: First, it reviews the literature relevant to business cycles and economic review. After that, the research methodology and results are presented and then summarized and discussed. Finally, a discussion with directions for further research is offered.

II. LITERATURE REVIEW

The extensive research about business cycles begun in the early twentieth century by Schumpeter (1935) and continued by Wesley Mitchell, Frederick Mills and Simon Kuznets who documented the characteristic and fluctuations of business cycles on then available data for the United States and other countries. The documented findings have shown a similar repeated behaviour of fluctuations in time which created good grounds for further research. Burns and Michell (1947) were the first to define business cycles as a pattern during a period of time that is seen as the aggregate economic activity of a nation, but without explaining the way one can measure aggregate economic activity and the way one can describe its patterns, as was stated in Harding and Pagan (2001). The question of business cycle was reintroduced during economic troubles in the 1970s, after almost a decade of economic prosperity, the occurrence of high rates of inflation were alarming for the economists (Plosser, 1989, 1992). As previously stated, in the mainstream economic theory the business cycles and economic growth are being viewed as two different, independent phenomena (Škare, 2014) which was criticized by Kydland and Prescot (1990). In the last few years, there have been published many studies about business cycles and their influences. Some studies included in their model that business cycles are due to shocks to aggregate demand, such as monetary and fiscal disturbances (Fisher, 1999), some investigated business regulation and economics growth nexus (Messaoud and Teheni, 2014) while some other researches revealed that a strong dynamics of the relationships between credit expansion and economic growth exists (Apostoaie and Percic, 2014) concluding that business cycle leads the credit cycle by one or two quarters as said by Male (2010), EBF (2011) and Alp et al. (2012). Schumpeter (1935) wrote "It follows that barring the elements of growth the trends of our time series are not due to influences distinct from those that create the cyclical fluctuations but simply embody the results of the latter.", which had a big influence for doing this study. There have been pro-cyclical growth theories arising (Škare (2014), Fatas (2001), Blackburn (1999)) and in this paper we will attempt to do a small contribution to that theory.

Kodama (2013) wrote that an economic growth that is dependent on considerably limited industries does not have a business cycle stabilization effect; in contrast, an economic growth that includes the development of various export-goods sectors reduces business cycle. Škare and Tomić (2015) agreed that "economic growth is a complex process and cannot be attributed to a single factor of observance such as business cycle approach" although "Business cycles are persistent and pervasive, interact with the growth trends and show important regulari-

ties of co-movement, relative timing, and relative amplitude of different economic variables". Dobrescu, Hristache and Iacob (2012) stated that unfortunately, the relevance of research to the current economic problems is often neglected and there seems to be a large gap between theoretical progress and economic practice, as economists have failed to incorporate the new contributions into their policies, macroeconomists should try to abandon the old ways and incorporate the new theoretical developments into their policies. Mazzi and Scocco (2003) agreed stating that there is not a specific software that contains all the techniques required for a complete analysis of the economic fluctuations phenomena.

This paper conducts empirical study which uses Granger causality test as part of the methodology. The test will be implemented on 46 European countries on which data of GDP rates in the time period 1969-2014 we have available. Wen (2007) upholds that the Granger causality concept and the empirical regularities documented in his study are an effective test for equilibrium business cycle models. There are other studies that are suggest the usage of the Granger causality test as Anderson (2014), Škare (2014) and Apostoaie and Percic (2014) did.

III. METHODOLOGY

The data used contains the sample of DGP rates of 46 European countries in period 1969- 2014.

Mainstream approach regarding modelling and analyzing economic growth is to decomposition a series in cycle and trend, but analyze and study them independently.

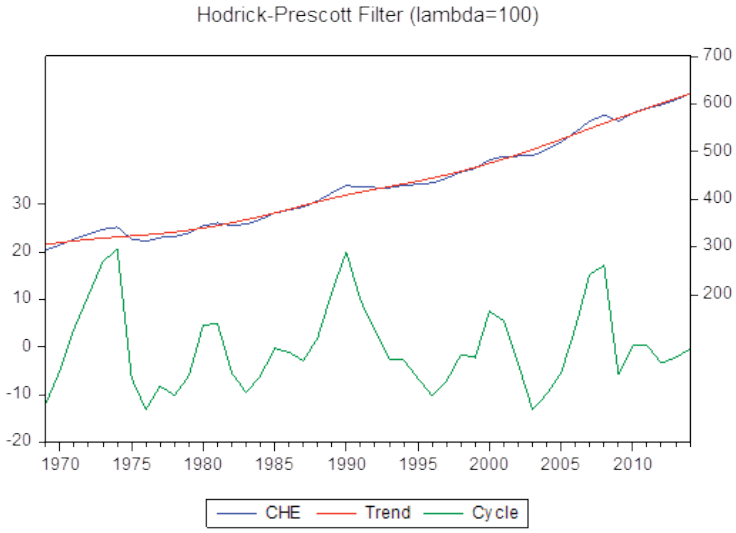
However, if we want to examine the correlation and causality between the business cycle and economic growth, different approach should be applied. Palma and Rosario (2005) argue that "if cycles and growth are endogenously related, any shock that affects one of them will affect the other" and they point out the critique that economic growth models fail to explain the business cycles, while business cycles' models fail to explain the growth. There are some tendencies towards procyclical growth theories and hysteresis hypothesis (Blackburn, 1999; Škare, 2014). In order to urge the shift in macroeconomic modelling of the growth and cycles, it is necessary to clearly indicate the nexus between economic growth and cycles.

The methodology choice relies on the mainstream approach at the beginning: decomposition of a series in cycle and trend. However, further analysis examines economic growth and the economic cycles together, in order to confirm the causality. First, series decomposition on trend and cycle using Hodric – Prescott filter, which will provide the basis for further examination. Covariance analysis using

ordinary method will check the correlation and covariance between economic growth and business cycles. Augmented Dickey Fuller test will be applied to cycle series to check if there is a unit root, as well as correllogram to check the autocorrelation of the economic growth rates. If the growth rate series shows the autocorrelation, then first or second difference is applied. Next, Johanson cointegration test will be applied in order to check for the cointegrating relations by model regarding intercept (no trend) in CE and test VAR at LAGS 1,1. Following the model of Škare (2014), Granger causality test will examine the causality. We will use Pairwise Granger causality test, at LAGS 2, which is default setting for this test.

Empirical analysis process will be shown in detail for a randomly chosen country, while results for all of the countries will be provided as a summary and appendixes.

Figure 1.: THE RESULT OF HODRIC-PRESCOTT FILTER APPLIED ON GDP RATE SERIES OF SWITZERLAND



Source: authors' calculation using eViews

Figure 1 shows the decomposition of the GDP rates on trend and cycle, where blue line denotes GDP rates for Switzerland, red line denotes trend and green line denotes cycle. Observing Figure 1, it can be noticed the alignment of three greater spikes of the business cycle (green line) with concurrent shifts in economic growth (blue line).

Figure 2.: THE RESULT OF COVARIANCE ANALYSIS FOR ECONOMIC GROWTH AND DECOMPOSED BUSINESS CYCLES OFSWITZERLAND

Covariance Correlation	CHE	CYCLES
CHE	9225.140 1.000000	
CYCLES	93.63590 0.111098	77.00169 1.000000

Source: authors' calculation using eViews

Figure 2 shows the result of covariance analysis using ordinary least squares for economic growth and business cycle for Switzerland, using 46 observations, where correlation between cycles and economic growth rates is 0.111098 and covariance 93.6359. Even tough, there is a positive covariance which indicates that an increase in one variable results in an increase in the other variable and the relation is positive. Given that the value is not standardized, we cannot use the covariance to assess the strength of a linear relationship. Correlation is relatively small, but positive, which also indicates that the nexus exists.

Figure 3.: AUGMENTED DICKEY-FULLER TEST OF SWITZERLAND'S BUSINESS CYCLES

Null Hypothesis: CYCLES has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.001478	0.0002
Test critical values:	1% level	-3.588509	
	5% level	-2.929734	
	10% level	-2.603064	

*MacKinnon (1996) one-sided p-values.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CYCLES(-1)	-0.614175	0.122799	-5.001478	0.0000
D(CYCLES(-1))	0.479302	0.133412	3.592631	0.0009
C	0.166583	0.970738	0.171604	0.8646

R-squared	0.401001	Mean dependent var	0.102115
Adjusted R-squared	0.371782	S.D. dependent var	8.119098
S.E. of regression	6.435215	Akaike info criterion	6.627194
Sum squared resid	1697.892	Schwarz criterion	6.748843
Log likelihood	-142.7983	Hannan-Quinn criter.	6.672307
F-statistic	13.72378	Durbin-Watson stat	2.104203
Prob(F-statistic)	0.000027		

Source: authors' calculation using eViews

Augmented Dickey Fuller test statistics show that the cycle does not have a unit root. Most of the cycle series of the observed countries will not show a unit root. That means that we can continue with the analysis of the deterministic model.

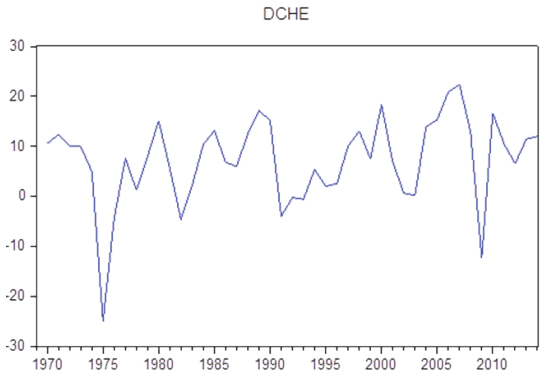
Figure 4.: SWITZERLAND ECONOMIC GROWTH RATE SERIES' FIRST DERIVATIVE CORRELLOGRAM

Sample: 1969 2014
Included observations: 45

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob
		1	0.294	0.294	4.1526	0.042
		2	-0.103	-0.207	4.6700	0.097
		3	-0.079	0.020	4.9874	0.173
		4	-0.120	-0.136	5.7253	0.221
		5	-0.189	-0.138	7.6175	0.179
		6	0.071	0.170	7.8934	0.246
		7	0.136	-0.002	8.9230	0.258
		8	0.074	0.052	9.2350	0.323
		9	-0.010	-0.053	9.2406	0.415
		10	0.064	0.106	9.4869	0.487
		11	-0.069	-0.097	9.7827	0.550
		12	-0.092	0.004	10.330	0.587
		13	-0.116	-0.132	11.216	0.593
		14	-0.166	-0.155	13.086	0.520
		15	-0.094	-0.000	13.709	0.548
		16	0.171	0.133	15.836	0.464
		17	0.198	0.078	18.784	0.341
		18	0.169	0.111	21.023	0.278
		19	-0.003	-0.081	21.024	0.335
		20	0.061	0.216	21.336	0.378

Source: authors' calculation using eViews

Figure 5.: SWITZERLAND ECONOMIC GROWTH RATE SERIES' FIRST DERIVATIVE



Source: authors' calculation using eViews

Switzerland economic growth rate series' first derivative shows no autocorrelation as shown in Figure 4, and Figure 5 shows graphic representation.

Economic growth rates' series of the observed countries will show autocorrelation at the level, but most of them will show no autocorrelation at the first or second difference.

Figure 6.: JOHANSEN COINTEGRATION TEST

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.773398	64.66933	15.49471	0.0000
At most 1	0.019192	0.833274	3.841466	0.3613

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Normalized cointegrating coefficients (standard error in parentheses)

CYCLES	DCHE
1.000000	0.200981
	(0.18851)

Adjustment coefficients (standard error in parentheses)

D(CYCLES)	-0.677293
	(0.16453)
D(DCHE)	-0.721074
	(0.16091)

Source: authors' calculation using eViews

Johanson cointegration test is applied in order to check for the cointegrating relations by model regarding intercept (no trend) in CE and test VAR, which includes three orthogonalized seasonal dummy variables, and uses one lag in differences (two lags in levels). The test provides estimates of all cointegrating vectors, and the existence of unit roots would imply that standard asymptotic distributions do not apply. The eigenvalue is not zero, hence there is at least one cointegrating vector. Trace test and maximum eigenvalue test indicates one cointegrating equation at level one. Unrestricted adjustment coefficients show that there are two vectors, and if there are two vectors for two variables, there are no unit roots. Finally, the test provides adjustment coefficients for a cointegrated equation.

Figure 7.: GRANGER CAUSALITY TEST

Null Hypothesis:	Obs	F-Statistic	Prob.
DCHE does not Granger Cause CYCLES	44	12.0478	0.0012
CYCLES does not Granger Cause DCHE		31.0427	2.E-06

Source: authors' calculation using eViews

The nexus itself does not imply causation in any significant way. To determine the causation, Granger causality test is applied. Granger test examines if growth causes business cycles in a way to determine how much of the current business cycles' values can be explained by past values of the economic growth. is to see how much of the current can be explained by past values of and then to see whether adding lagged values of can improve the explanation. Likewise, Granger causality test questions whether business cycles cause growth. Figure 7 shows the results of Granger causality test for Switzerland. We can see that we can reject the null hypothesis, given the associated probabilities. Therefore, we can conclude that Switzerland's economic growth rate in first difference do Granger cause Cycles; and Cycles do Granger cause Switzerland's economic growth rate in first difference.

IV. RESULTS

Following the provided methodology, the results are obtained for 46 European Countries, summarized and presented in following table.

In order to examine the nexus between economic growth and business cycles, following values are presented in the table: covariance, correlation, adjustment coefficients of Johansen cointegration test and results of Granger causality test.

Observations summarized in the Table 1 show that values of covariance are positive, hence, as one variable changes so does the other. Values of correlation are significant and positive for all observed countries. Johansen cointegration test shows the cointegrating equation adjustment coefficients.

The most important finding is the result of the Granger causality test. As presented in Table 1, cycle does Granger cause GDP for every observed country. For most countries is true that GDP does not granger cause cycle. There are countries for which is true that GDP does Granger cause cycle: Greece, Ireland, Portugal, Spain, Cyprus, Poland *, Iceland, Azerbaijan, Kyrgyzstan, Moldova, Tajikistan *, Turkmenistan *, Uzbekistan. At a glance, most of this countries have been going through a rough transitional period. However, the reason why Granger causation appears for this countries should be better examined in future research.

Table 1.: TESTING RESULTS

Europe	Covariance (cycle/ growth rates)	Correlation (cycle/ growth rates)	Johansen cointegration test		Granger causality test	
			Adjustment coefficient D(CYCLES)	Adjustment coefficient D(GROWTH rates)	GDP → cycle	cycle → GDP
European_Union_15						
Austria	24,038720	0,068611	0,152449	0,160687	does not Granger cause	does Granger cause
Luxembourg	1,253975	0,090532	-0,203204	-0,219649	does not Granger cause	does Granger cause
Belgium	36,248220	0,074311	-0,776578	-0,824488	does not Granger cause	does Granger cause
Denmark	33,631490	0,115051	0,343531	0,368419	does not Granger cause	does Granger cause
Finland	53,656060	0,158472	0,160807	0,181677	does not Granger cause	does Granger cause
France	1158,225000	0,074063	0,377888	0,406855	does not Granger cause	does Granger cause
Germany	2578,287000	0,083550	0,072806	0,075838	does not Granger cause	does Granger cause
Greece	200,383400	0,338946	0,030343	-1,053736	does Granger cause	does Granger cause
Ireland	61,674340	0,162704	0,135993	-0,930779	does Granger cause	does Granger cause
Italy	1303,410000	0,112224	0,347782	0,387996	does not Granger cause	does Granger cause
Netherlands	218,610600	0,103403	-0,633049	-0,579499	does not Granger cause	does Granger cause
Portugal *	32,955110	0,129508	-0,071801	-1,104844	does Granger cause	does Granger cause

Europe	Covariance (cycle/ growth rates)	Correlation (cycle/ growth rates)	Johansen cointegration test		Granger causality test	
Spain	1263,274000	0.145459	0,054996	-0,961017	does Granger cause	does Granger cause
Sweden	86,619080	0,112270	-0,557763	-0,615557	does not Granger cause	does Granger cause
United_ Kingdom	2126,254000	0.103335	-0,523546	-0,575081	does not Granger cause	does Granger cause
A13						
Bulgaria	4,968226	0,330695	0,461856	-0,622631	does not Granger cause	does Granger cause
Croatia	10,179780	0,282882	0,206264	0,218887	does not Granger cause	does Granger cause
Cyprus	0,408180	0,107342	-0,315616	-0,336156	does Granger cause	does Granger cause
Czech_ Republic	40,700960	0,193005	0,411190	-0,657298	does not Granger cause	does Granger cause
Estonia	1,878170	0,396081	-0,042243	-0,049327	does not Granger cause	does Granger cause
Hungary	26,883500	0,317682	0,125361	-0,940413	does not Granger cause	does Granger cause
Latvia	5,196267	0,527062	0,685853	-0,395706	does not Granger cause	does Granger cause
Lithuania	7,916036	0,467944	0,396287	-0,673893	does not Granger cause	does Granger cause
Malta	0,027437	0,079400	-0,060030	-0,066527	does not Granger cause	does Granger cause
Poland *	69,002320	0,083307	0,114057	-0,891123	does Granger cause	does Granger cause
Romania	85,372870	0,425898	0,061798	-0,037074	does not Granger cause	does Granger cause

Europe	Covariance (cycle/ growth rates)	Correlation (cycle/ growth rates)	Johansen cointegration test		Granger causality test	
Slovakia	9,799466	0,195126	0,024352	-0,055870	does not Granger cause	does Granger cause
Slovenia	2,071092	0,145461	-0,666897	-0,722961	does not Granger cause	does Granger cause
Other_Western_Europe						
Iceland	0,166743	0,140588	0,279613	-0,801408	does Granger cause	does Granger cause
does not Granger causerway	36,005270	0,068367	-0,034033	0,046654	does not Granger cause	does Granger cause
Switzerland	93,635900	0,111098	-0.677293	-0.721074	does not Granger cause	does not Granger cause
Other_Central_Europe						
Albania	0.258447	0.241826	0,169731	-1,517746	does not Granger cause	does Granger cause
Bosnia_ Herzegovina	N/a	N/a	N/a	N/a	N/a	N/a
Macedonia	0,094440	0,304825	0,353500	-0,716749	does not Granger cause	does Granger cause
Serbia	20,321670	0,708381	-0,692042	-0,740408	does not Granger cause	does Granger cause
Former_Soviet_Union						
Russia	10375,910000	0,565891	0,072405	-0,944059	does not Granger cause	does Granger cause
Ukraine	309,959000	0,689910	-0,012260	-0,109923	does not Granger cause	does Granger cause
Other_Former_Soviet						
Armenia	0.564150	0.415872	-0,495030	-0,563223	does not Granger cause	does Granger cause
Azerbaijan	14,113730	0,418968	-0,029987	-1,108128	does Granger cause	does Granger cause

Europe	Covariance (cycle/ growth rates)	Correlation (cycle/ growth rates)	Johansen cointegration test		Granger causality test	
Belarus	5,511725	0,262089	0,165308	-0,880275	does not Granger cause	does Granger cause
Georgia	4,832149	0,606274	0,263653	-0,790411	does not Granger cause	does Granger cause
Kazakhstan	55,373090	0,338501	-0,049741	-1,032328	does not Granger cause	does Granger cause
Kyrgyzstan	0,128947	0,474979	0,718212	-0,356603	does Granger cause	does Granger cause
Moldova	0,707108	0,615272	-0,005191	-1,044261	does Granger cause	does Granger cause
Tajikistan *	0,380751	0,570566	-0,032960	-1,060766	does Granger cause	does Granger cause
Turkmenistan *	1,967174	0,285252	-0,091793	-0,192014	does Granger cause	does Granger cause
Uzbekistan	2,461180	0,232311	0,089999	-0,911335	does Granger cause	does Granger cause

**autocorrelation could not be avoided at 2nd level (2nd difference)*
Source: authors' calculation using eViews and summarization

V. DISCUSSION

This research examines the nexus between business cycles and economic growth, such that provides empirical identification of the nexus. To our knowledge, this is the first study which uses Granger causality test as a methodology on the sample of 46 European countries.

The results are clear regarding the correlation and covariance, and consistent with previous research. The results regarding the Granger causality are partially unexpected. The results show that business cycles Granger cause economic growth for every observed country in the sample. However, economic growth Granger causes business cycles only for thirteen countries. For most of the observed countries, economic growth does not Granger cause business cycles.

In addition, leaving aside countries in transition, GDP does Granger cause cycle for "convergence" countries (Portugal, Spain, Ireland, Greece and Cyprus).

This finding is significant, given that mainstream macroeconomic paradigm treats business cycles and economic growth as two unrelated forces which drive economy. The insight that business cycles Granger cause economic growth for every observed country in the sample provides the cornerstone for re-examining the mainstream macroeconomic models, as well as following policy recommendations. The results enable better understanding of business cycles and economic growth nexus, which contributes to economic growth and business cycles theory.

The limitation of this study is used sample. One of the main critiques to econometric modelling of economic growth and business cycles are small samples: there are only 192 countries in the world, and in this paper only European countries (for which data exists) are examined. This could be corrected in future research by observing all countries (for which the data is available). The results are replicable, and hold for internal and external validity. Further limitation regards to used Hodric-Prescott decomposition filter which allows the opinion that the nexus found between long-term growth and business cycles could be just a mere consequence of the implemented decomposition. That opens a requirement for a further research using different methodology set.

The significance of the findings does not occur only in contribution to the theory, but also to practical policy implications. Given the discovered nexus, economic policy has to be adapted in order to enable macroeconomic tools for managing business cycles while expecting outcomes in economic growth.

Regardless the achieved results, this research has just scratched the surface and set the basis for further research of this field. Further research of this topic could be regarding the more detail insight into causal connection of the impact of the economic growth to business cycles. In addition, re-examining the macroeconomic models in order to implement the nexus between the growth and the cycle is one of the mandatory further research. Following the adjusted macroeconomic models, a new set of policy recommendation, tools and measures should be determined, hopefully, to avoid some future recessions.

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"CULTURAL WORK" - A SUCCESS FACTOR IN HEALTHCARE FACILITIES

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ABSTRACT

This paper deals with organizational culture in healthcare facilities and the effect of the deliberate application of cultural values on the quality of interdisciplinary cooperation as well as the satisfaction of patients and staff. An extensive analysis of the theoretical background is the basis for the study. The question that needs to be investigated is which contribution does "cultural work" make to the success of a healthcare facility and in particular how cultural values can be put into practice so that they become noticeable. Findings from the theoretical discussion and from a case study in the context of healthcare facilities (in the present paper) as well as empirical research (in the next stage of the research project) provide answers to the question of the influence of cultural values that are actually practiced on a day-to-day basis in healthcare organizations. The careful development and the sustainable implementation of a patient-centred and employee-related organizational culture is called for. A significant additional benefit can be gained from the management of cultural values. The findings at management level in healthcare facilities contribute to the promotion of "implementation expertise" and make an important contribution to the continuous design of the normative level.

I. INTRODUCTION

"A hospital is a microcosm in which the whole range of human life is shown", writes the theologian, philosopher and social scientist Clemens Sedmak in his book "Remaining Human in the Hospital" (*original title: „Mensch bleiben im Krankenhaus"*), published in 2013. He continues with the questions: "What about human beings in a hospital?" "What does it feel like to work there as a doctor or a nurse?" "What does it mean to be a patient there?", and especially "What influence does the hospital have on me?" (Sedmak, 2013, 7). In his conclusion Sedmak (ibid., 153) stresses again the importance of organizational culture in hospitals by referring to the "moral life": "A hospital has a moral face" (De George 1982, as cited by Sedmak 2013, 153) and patients have legitimate expectations regarding morality (Sedmak, 2013, S. 151). A second question, which forces itself into the foreground, is whether the organizational culture of health facilities that emphasizes values can lead to a competitive advantage. But these considerations must not be limited to individual healthcare facilities. From the perspective of the patient, his or her way usually does not end at the hospital gate. In this respect many interfaces need to be overcome. Supply routes of healthcare services often lead through several institutions. If the expectations of patients are taken seriously, holistic healthcare in the form of a coordinated healthcare system is called for. Integrated healthcare management is the key to this kind of healthcare. The aim is to achieve a continuity of healthcare with regard to the individual treatment as well as the specific needs of the patients. According to the World Health Organization, "integrated healthcare" is the "management and delivery of health services" so that clients "receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system" (WHO, 2008, 1). This requires networks instead hierarchies, the overall welfare of the patient before self-interest and more flexibility instead of rigidness. It is the responsibility of each institution to ensure that the transfer of the patient is carried out both in medical terms as well as in a "humane manner".

With regard to the first question above, there are three sub-questions: How can the effective application of cultural values in healthcare facilities be controlled? How can it lead to better interdisciplinary cooperation? And finally: How can culture be shaped for the benefit of patients? This article will try to give answers to these questions.

II. ORGANIZATIONAL CULTURE IN HEALTHCARE FACILITIES

Before discussing ways how culture can be shaped, the phenomenon of "corporate culture" in the context of healthcare facilities needs to be considered in depth.

A. "Culture" as a phenomenon in organizations

Etymologically, (organizational)"culture" can be understood as common values that exist and are practiced in an organization. "Culture" comes from the Latin word *´cultura´* and forms a meaningful context with the Latin word *´colere´* - to *´cultivate´*. (Kluge, 2012, 545; Kirchner, 2007, 31) and secondly it means, "to ensure care for someone or for something" (ibid.). The British sociologist Anthony Giddens (2004, 685) defines "corporate culture" as a part of the management theory that "seeks to increase productivity and competitiveness through the creation of a unique organizational culture". Various measures are used to shape and develop the organizational culture, e.g. company events in order to involve employees and to promote loyalty as well as cooperation (ibid., 365). The German company Pixum, for example, has implemented an exemplary measure to institutionalize structures that are based on values. Instead of a works council a "Culture Council" was established as a representative of the employees as well as "keepers of the corporate culture". In addition to the general duties of the staff committee the Culture Council handles inquiries relating to issues such as "appreciation", "work organization", „corporate health" or „social benefits" (Vranken & Attallah, 2016, 76). The ethics expert Michael Lischka (2016, 9) calls for the establishment of organizational processes that enable "ethical reflection". As in the US and Great Britain, where this practice is already common (ibid.), a so-called "ethics officer" sustains ethical endeavours in the form of workshops and is also the contact person for ethical issues ("ethics hotline"). Robbins stresses the dependence of organizational culture on the founder of the organization: "…customs, traditions, and a general way of doing things are largely due to what it has done before and the degree of success it has had with those endeavors". According to Robbins, founders are the "ultimate source" of an organization´s culture. The founder´s vison shows all organizational members "what the organization should be". (Robbins, 1998, 603) Below, especially in the discussion of the case study, the major impact of the founder on the organization can be seen.

B. The "entrenchment of culture" in normative management

Normative management describes the principles, norms and rules which ensure the "viability" and the "capability of development" of the enterprise in the long term (Bleicher, 1994, 44; Rüegg-Stürm, 2002, 71; Bleicher as cited by Siller, 2011, 64). The vision of the enterprise is entrenched at the normative level of management. Basic aims are formulated and basic principles are defined. Management has to ensure that the "vision and basic principles are also lived" (Eschenbach et al. as cited ibid., 65). Normative aims are to be in tune with the owner of the enterprise. They form the basis for strategic adjustments and subsequently for the operational work (ibid.) Siller (ibid.) sees in normative aims, inter alia, a "source of inspiration" for the activity to be performed as well as the fact of "ensuring the realization of meaning" through the development of an organizational culture and an ethical value system. Furthermore, leadership should be legitimized on the basis of "professional" and "morally flawless corporate governance". Standards should be established for "ethically flawless action" for all employees in a healthcare facility. (ibid.) "Central dimensions" and "decisive fields" of management are described and management is differentiated into three levels, "normative management", "strategic management" and "operative management" (Rüegg-Stürm, 2002, 71). In "operative management" everyday business is mastered. The service provision of the enterprise and an economical use of the resources available are in the fore. "Strategic management" refers to a long-term perspective, is characterized by a high degree of responsiveness to changes in the environment and aims at preserving the substance of the enterprise. (ibid.). "Normative management" serves the ethical legitimization as well as the frame for the enterprise, at both management levels, strategic as well as operational. It therefore functions as the foundation for all management activities. Based on this insight, Blecher (1995, 49) pursues a comprehensive approach, favouring the "integration of the dimensions of management in the wake of the development of a company" as well as the integration of all significant components of an enterprise into "a bigger system context". Blecher is one of the founders of the St. Gallen Management Model, which has become fundamental for system-oriented management theory (in 1991, model of the 2nd generation). The differentiation of management was carried out in three levels (Rüegg-Stürm & Grand, 2015, 5). In his concept "Integrated Management" Blecher pleads for a "paradigmatically marked leading idea", a "management philosophy" to which the normative, strategic and operative levels are to be aligned. This management philosophy focuses on the idea that the image of man should be the basis of an enterprise and of the value system it is built upon. (Blecher, 2011, 87) How does one succeed in making the values underlying the enterprise perceptible to all em-

ployees and clients? The former top executive Jürgen Dormann answers this question in his foreword to the book "Handbuch Wertemanagement", published by the German business ethicist Josef Wieland: "An enterprise needs clearly documented statements and instructions with regard to value management by which employees and executives orientate themselves and on which customers, business partners and investors can rely" (translated into English). (Wieland, 2004, 7)

C. What is different in healthcare facilities?

Looking at healthcare facilities from a conceptual point of view is rather difficult. Healthcare facilities are characterized, on the one hand, by their diversity and, on the other hand, by high complexity. Therefore, some characteristics of health facilities need to be identified and defined. Healthcare facilities are "places that provide health care. They include hospitals, clinics, outpatient care centres, and specialized care centres, such as birthing centres and psychiatric care centres" (National Institutes of Health, 2016a, www). The National Institutes of Health (ibid.) has added nursing homes to this list. Nursing homes are places "for people who don't need to be in a hospital but can't be cared for at home. Most nursing homes have nursing aides and skilled nurses on hand 24 hours a day." National Institutes of Health (2016b, www) "Some nursing homes are set up like a hospital." (ibid.) The term healthcare facility proves to be a flexible term. In the Austrian healthcare system the distinction between nursing homes and hospitals depends on the form and extent of medical treatment within the in-patient health facility and, on the other hand, on legal aspects. Scientific literature as well as practice show different conceptual boundaries. On its official website, the City of Vienna, for example, includes all municipal places for health and counselling services in the term healthcare facilities (Vienna City Administration, 2016, www). In this article, a conceptual distinction will be made that is based on the definition by the American National Institutes of Health and includes also ambulatory care facilities. Accordingly, healthcare facilities are hospitals, rehabilitation centres, nursing homes or even primary healthcare facilities such as doctors, nurses or physiotherapists along the supply chain in the health and social services.

D. The complexity of healthcare facilities

The complexity of healthcare facilities is most evident in hospitals. Brenzel (2013, 253) speaks of the emergence of "high-performance organizations with high complexity" and increasing workloads. Hospital organizations are also exposed to rising numbers of cases, shorter residence times, new medical technologies etc. They are also subject to a significant "economic efficiency and competi-

tive pressure" and to more and more new legal requirements (such as reporting and documentation requirements). Brenzel (ibid., 253) as well as Marckmann and Maschmann (2014, 158) show that the increasing commodification of hospitals poses a threat to the preservation of values, such as "patient orientation" or the "appreciation of employees". Even so, it seems important to combine ethics and economics in some kind of "rigorous value management" and to integrate normative specifications in everyday life. This requires the corresponding design of "conditions for action" (ibid., 161), as well as resources that can be gained by exploiting the existing potential. Ethical guidelines are thus anchored in the operational hospital business so that they become an "integral part" (ibid.) of the thoughts and actions of all stakeholders. Ethics must not be an „opponent" of purely economic considerations and must be lived in organizations. The health economist Hagen Kühn from the Berlin Science Centre for Social Research thinks that increasing commodification leads to conflicting interests in institutions and amongst health professionals (Kühn, 2003, 77). Profitability and competitive pressure and the resulting "risks for misconduct" raise issues that can be attributed to "structural ethics" (ibid.; Kühn, 2011, 47). For the organization ethicist Karl Homann (as cited in Marckmann & Maschmann 2014, 161) one of the tasks of management is to create the "conditions of action" so that morality in competition cannot be systematically exploited or eroded by systematic disincentives.

To create space for the optimization of external conditions ("structural conditions"), however, new approaches and other strategies are necessary that allow for further thoughts and actions (Brenzel, 2013, 254) as well as the "integration of healthcare" within and between healthcare institutions. Brenzel uses a trenchant language, speaking of „functional silos", in which the individual health professionals (stakeholders) work. Similarly, Mayer (2016a, www), calls for a move "away from too much functionalism" in the institutions and for a "return to naturally motivated ethical behaviour". Like Brenzel, he sees in "integrated care management" the answer to many questions that are currently being posed in healthcare. What is essential is the coordination of the supply areas through "cooperation", "coordination" and "communication" (Mayer, 2016b, www). Both, the individual level, in particular the willingness to cooperate, as well as the structural level, including the way in which cooperation and communication are maintained internally and externally, are becoming increasingly important. "Structural capital" (as organizational structures, regulations, inter-institutional relations, etc.) is one of the intangible assets in the business of healthcare, serves as a potential for performance activities and forms the basis for the establishment and exploitation of other intangibles such as human and relational capital (Bode, 2015, 59; Stoi, 2016,

2). In order to meet future healthcare challenges and changing conditions in the best way, Bode (ibid., 57) advocates the addition of "development and renewal capital" to these categories. This refers to the ability of healthcare companies "not only to observe changes but also to analyse the opportunities that result from them, and to benefit from them" (ibid., 60). These include not only the structural conditions, but also the willingness and the ability of the members of an organization to respond to changes. Similarly, existing cooperation on strategic and operational levels should be added (ibid.).

E. "Culture" and "leadership"

In his essay on the spiritual foundations leadership *("Die geistigen Grundlagen des Führens")*, the philosopher and theologian Kirchner (2007, 31-34) examines the leadership behaviour of Benedict of Nursia, the founder of the Benedictine order, and calls it a "worthy synthesis" (ibid., 32) of "culture" and "leading people". Christine Kane-Urrabazo has analysed the role of management in the development and maintenance of organizational culture with the result that "attitudes", "values" and than "behaviour" of an institution depend on its leadership, implemented through "role modelling and communication" on all levels (Kane-Urrabazo, 2011, 193). In her investigation of the relationship between organizational culture, leadership behaviour and job satisfaction also Yafang Tsai (2011, 8) underlines the importance of organizational culture. She concludes that when there is "good interaction" between leader and subordinates, there will be contributions to team communication and collaboration, and the encouragement of subordinates to accomplish the mission and objectives assigned by the organization, which in turn enhances job satisfaction. If managers communicate the vision of the organization to subordinates in a good way, it is possible to enhance work behaviour and good attitudes of employees (ibid.).

III. THE IMPORTANCE OF CULTURAL WORK

An enterprise needs clear statements and instructions with regard to value management (see above) on which employees and all the other stakeholders of the enterprise can rely. Value management requires a creation that is intended by the owner, that is entrenched in the normative management of the enterprise and that is noticeable and perceptible at the strategic level as well as in the daily business activities: "Cultural Work!"

A. Definition of terms

The term culture was explained above, but what does "culture" mean in the context of "cultural work"? What does "cultural work" mean? The term "work" can be seen positively in the context of „cultural work". Etymologically, this term can be traced back to the Old High German word *´wurchen´*, which means *´to work´*, *´make´*, *´create´*. It is also related to the Old English *´wircan´* with the meaning *´wirken´* (to have an effect). Thus a broader explanation of cultural work has been arrived at: "cultural work" means the constant effort, based on fixed values, to develop culture and to build structures and to enforce specific measures which serve the continuation of the existing and lived values" (see also Vincent Group, n.y.b., 1).

B. "Value Management" in general

According to the German economic ethicist and founder of „governance ethics" Wieland, general value management systems can be described as "company-specific instruments" which aim to define the "moral constitution of teams or an organization and their guiding values and to bring them to life in everyday practice" (Wieland, 2004, 23). The main values of a company are an "expression of the normative side of the company" and include "all mechanisms a company is in command of in this respect" (ibid.). They form the basis of value management and contribute to the identity formation and structure decisions of a company. Organization members as well as existing and potential cooperation partners are given „reliable expectations with regard to their actions and behaviour" (ibid.). Wieland (ibid., 24) distinguishes four value categories: performance values (such as competencies, benefit, quality), communication values (e.g. openness, transparency, honesty), cooperation values (such as readiness for cooperation, team orientation, communication orientation) and even moral values (e.g. integrity, fairness, truthfulness).

The following chapter is an analysis of how the Vincent Group, an association of several Austrian hospitals and nursing homes, applies these values to cultural work The Vincent Group is a strategic holding organization with several denominational owners that jointly bear the responsibility for their healthcare facilities.

IV. VALUE MANAGEMENT USING THE EXAMPLE OF THE VINCENT GROUP

Organized as a holding company, the Vincent Group forms a composite of hospitals and nursing homes of various denominational entities. With approximately 6,000 employees the Vincent Group is one of the most important private

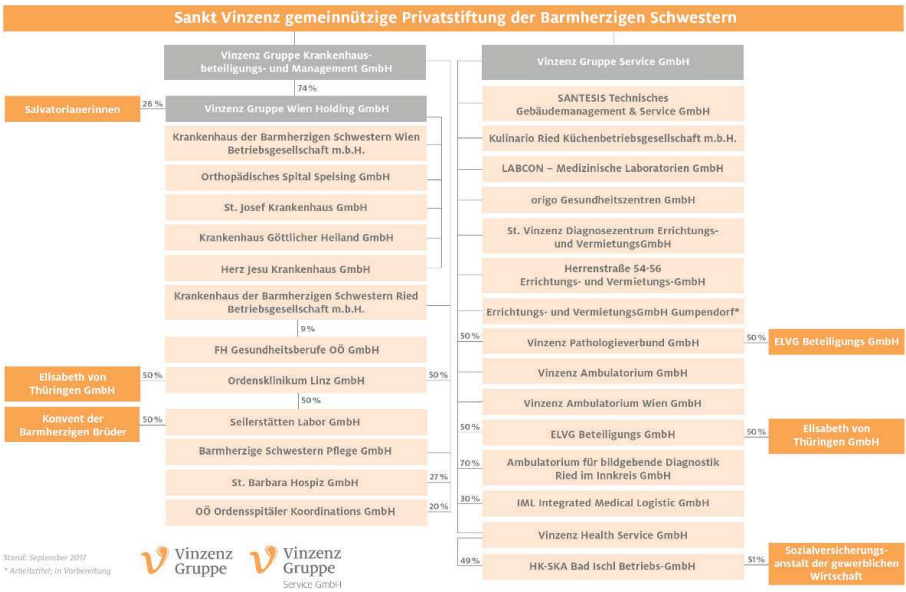
non-profit health services providers in Austria (Vincent Group, 2016, www). In addition to the hospital "Krankenhaus der Barmherzigen Schwestern Wien" in Vienna, which houses the holding company´s registered office, the Vincent Group includes the Vienna hospitals "Orthopädisches Spital Speising", "St. Josef-Krankenhaus", "Krankenhaus Göttlicher Heiland" and "Herz Jesu Krankenhaus" as well as the nursing homes "St. Katharina" in Vienna and "St. Louise" in Maria Anzbach in Lower Austria. In Upper Austria there are two facilities, namely "Krankenhaus der Barmherzigen Schwestern Linz" and "Krankenhaus der Barmherzigen Schwestern Ried", that are part of the Vincent Group with a total of 2,200 hospital beds and approximately 170 nursing beds. (Ibid.). All hospitals of the Vincent Group are organized as legally and economically independent operating companies in the organizational form of limited liability companies. The "Vinzenz Gruppe Krankenhausbeteiligungs- and Management GmbH" *(Engl.: "Vincent Group Hospital Holding and Management Ltd.")* is responsible for the strategic management of all operating companies which participate in the holding, the "Barmherzige Schwestern Pflege GmbH" *(Engl: "Sisters of Charity Care Ltd.")* for all nursing homes.

The establishment of the Vincent Group as the "Kongregation der Barmherzigen Schwestern vom hl. Vinzenz von Paul Holding GmbH" *(Engl.: "The Congregation of the Sisters of Charity of Saint Vincent de Paul Holding Ltd.")* took place on 16.10.1995. The aim was to manage the three hospitals in Vienna and Upper Austria that were completely owned by the Sisters of Charity at the time under the umbrella of a strategic holding. After another hospital, "Orthopädisches Spital Speising", became part of the holding on 01.01.2000 that previously belonged to the "*Ordenskongregation* Dienerinnen des Heiligen Geistes" *(translated "Religious Congregation Servants of the Holy Spirit")*, the holding company was renamed as "St. Vinzenz Holding GmbH". After three years, the name was changed to "Vinzenz Gruppe Krankenhausbeteiligungs- and Management GmbH". Other hospitals of other religious communities were incorporated and a foundation named "Sankt Vinzenz gemeinnützige Privatstiftung der Barmherzigen Schwestern" *(Engl.: "Saint Vincent non-profit private foundation of the Sisters of Charity")* was founded. On 01.01.2010, the hospitals and the service operations (hospital kitchens, engineering services, etc.) were incorporated into the foundation, followed by the nursing homes on 01.01.2011. (Vincent Group, 2016, www). Through the foundation, the Sisters of Charity intend to secure the continuous existence of their non-profit healthcare facilities based on their values (Barmherzige Schwestern, 2016, www). Establishing a charitable foundation should give the foundation assets an exclusively social and charitable objective. Based on the values of the Sisters of Charity, the aims of the foundation were defined as "welfare", "health and medical

care", "education", "schooling" as well as "initial and continuing vocational training" for the "benefit of the general public". As of October 2014, a strategy process named „Strategie 2020. – Für eine gesunde Zukunft" *(Engl.: "Strategy 2020 - for a Healthy Future")* has been implemented. Five hospitals in Vienna are supposed to be become "specialized hospitals". For the Upper Austrian hospitals further collaborations with hospitals of other owners are planned. (Vincent Group, 2016, www) The first cooperation based on this new concept was implemented as a merger of "Krankenhaus der Barmherzigen Schwestern Linz" and the order hospital "Krankenhaus der Elisabethinen" into the new hospital „Ordensklinikum Linz" („Order Hospital Linz") on 01.01.2017 ". (Vincent Group Elisabethinen, 2017, www)

The following chart gives a clear overview of all the facilities of the Vincent Group (Vincent Group, 2017, www).

Figure 1.: Organization structure of the Vincent Group, Vincent Group (2017, www)



The origins of value management in the Vincent Group date back to an almost randomly carried out ethnographic field study by a PhD student who was looking for a company where she could conduct her research. At the invitation of the former managing director of the "Krankenhaus der Barmherzigen Schwestern" in Vienna, she started to investigate the organizational culture of the hospital in the year of the founding of the first Vincent Group (1995) (Szabo, 1998, 65) as part of a business organization research project. Initial analysis of organizational docu-

ments were followed by ethnographic interviews with selected members of the organization as well as observations of everyday life in the organization (ibid., 71). According to Szabo, organizational documents reflect the "construction of social reality through the members of the organization" (ibid.). Since the universal set was still unclear, a "theoretical sample" (Glaser & Strauss, 1998, 51) was specified. Subsequently, 29 ethnographic interviews ("problem centered") were conducted with 19 different members of the hospital organization team (Szabo, 1998, 77). The recorded observations looked primarily at the interaction between the members of the organization: "Who spoke when, with whom, in what way, who exerted control over a situation?" (Ibid., 88). The analysis of the data focused on four questions that covered organizational groupings („social categories" based on common characteristics; also: "cultural fields"). A key question here was: "Which groups exist in the organization?" (Ibid, 91,.) Szabo (ibid, 94.) acknowledges organizational groupings also as "part of the social construction of reality by the organization's members". The second question is: "How did the individual groups develop?" (Ibid, 91) According to Szabo (ibid, 109.), the development is, on the one hand, influenced by the history of the hospital and, on the other hand, by the internal environment of the organization as well as the external environment. Two further questions focus on topics these groups deal with, as well as at the way interactions within and between groups function (ibid., 91). Apart from the taxonomy applied, Szabo distinguishes between "in-groups", which organization members feel that they belong to, and "out-groups". Furthermore, she graphically illustrates the connections between the categories (ibid., 97-99). In the interviews, the affiliation to certain social categories ("in-group") was reflected also in the language (for example, by "we-statements") (ibid., 100). It is striking that almost all members of the organization define the hospital organization itself as in-group, suggesting a high level of identification with the Order Hospital (ibid., 105). Szabo's study from 1995, which, as explicitly stated, is the analysis of an individual case, empirically refutes the idea that organizational culture can be designed without problems (such as the "corporate culture approach"), even though it is possible. Moreover, she refers to the homogeneity of organizational culture (ibid., 301), which she describes as an umbrella term for the "thinking, feeling and acting of members of the organization", resulting in different, partially overlapping cultural fields ("cultural groupings"). The coexistence of the different cultural fields and their common efforts bring about a dynamic in the interdisciplinary and multi-professional cooperation in the hospital. (ibid., 301-302)

V. THE EFFECTS OF ACTIVE VALUE MANAGEMENT IN HEALTHCARE FACILITIES

"Values address people themselves, they fascinate people, touch and move them, trigger enthusiasm and rational insights. Nobody can prescribe values. One cannot manage values, but one can create spaces in which positions based on values can (but do not have to) grow and develop." *(original German text: "Werte sprechen von sich aus eine Person an, ziehen sie in ihren Bann, berühren und bewegen sie, lösen in ihr Begeisterung und vernunftmäßige Einsichten aus. Werte kann man niemandem verordnen. Werte selbst kann man nicht managen, aber man kann Räume schaffen, in denen Wertehaltungen wachsen und sich entwickeln können (nicht müssen).* " (Vincent Group, n.y.b., 1) The application of this statement doubtlessly requires effort, which is proven by all the measures the Vincent Group has taken in the past few years. Thus the Vincent Group has developed a trans-institutional concept which focuses on patients as well as potential patients. Following the long-standing as well as proven experiences in value management of the Vincent Group, it seems that it is less about the active influence on behavior, but rather about the creation of suitable relations. Relations that allow for the development of the desired culture.

Lived value management brings many advantages. Beside the orientation on the basic values of the enterprise, this system also justifies decisions, actions as well as approaches to the outside world. It can be understood as a token of stability and correctness when co-operating within the Vincent Group as well as other institutions. Moreover, values can also have a financial aspect, increasing the value of a company as well as lowering costs. Thus, ultimately better results can be achieved. (Bertelsmann Foundation, 2008, 11)

A. How can you measure the outcome?

An interesting approach, based on little evidence, however, to measure culture refers to the so-called "internal quality" of healthcare institutions, which is understood as a critical success factor for a company (Rechkemmer, 2012, 879). In general, "quality" is understood as the "degree of compliance with the characteristics of a patient-oriented, transparent, effective and efficient delivery of health services" (according to the Austrian Health Quality Act). The founder of this approach, however, sees it primarily as the fulfilment of "values" and "practices", which are measured, controlled and analysed by means of "micro-controlling" (Rechkemmer, 2012, 883; Brenzel, 2013, 256). Based on regular employee surveys, whose results are converted into meaningful indicators, the internal quality and the degree

of the fulfilment of the measurement variables claimed are determined. In the case of deviations, measures to correct them are developed as part of "integrated planning" schemes (ibid.). The focus is on an "inspiring" and a feeling of community that is perceptible to patients (Ibid, 879; Rechkemmer, 2013, 920). Rechkemmer (ibid., 922) defines internal quality as the "fourth dimension" of the dimensions of Avedis Donabedian´s healthcare quality model ("structure", "process", "outcome"), whereby individual partial qualities are always associated with internal quality. Just like structure, process and outcome quality, internal quality is subject to a process of continuous optimization (ibid., 924). On the other hand, Rechkemmer (2012, 880) sees a change of values, depending on the constellation of these changes, as a potential early indicator of organizational development. Without providing evidence-based proof, Rechkemmer (ibid., 879) associates good internal quality with "optimal efficiency and competitiveness" as well as "optimal motivation and job satisfaction", in addition to "attractiveness for healthcare professionals" (ibid.; Rechkemmer, 2013, 922). However, it makes sense to ask for an integrated management view (Rechkemmer, 2013, 923).

B. Limits of "cultural work"

The psychologist, economist and management consultant Reinhard Sprenger warns of a craving for admiration. In a very striking manner, he describes "institutionalized craving for admiration" (Sprenger, 2015, 190) as an evil that is associated with high transaction costs and that inhibits self-determination, initiative, innovation and entrepreneurial acting. In his book with the slightly catchy title "Das anständige Unternehmen" *(Engl.: "The Decent Company")* he presents the thesis that an excess of "institutional intrusiveness" (ibid., 17) prevails in modern companies. Boundaries are crossed, free spaces are abolished and the consequent lack of distance is disguised as "good intentions", "solicitousness" and "support". Sprenger speaks of the "total inclusion of the hand, the heart and the brain" of the complete monopolization of the working population by the world of work (ibid., 349). Like Dietrich Bonhoeffer he advocates a "culture of distance" (Bonhoeffer as cited by Sprenger, 2015, 348). Thus, in Bonhoeffer's book entitled "Feeling of Quality" (*original title: "Qualitätsgefühl"*) he claims: "Wenn wir nicht den Mut haben, wieder ein echtes Gefühl für menschliche Distanzen aufzurichten und darum persönlich kämpfen, dann kommen wir in einer Anarchie menschlicher Werte um." *(Engl.: "If we do not have the courage to re-establish a real sense of human distances and also fight for it, then we will perish in an anarchy of human values.")*. In Sprenger's view, distance is about "respectful coexistence" ("in a respectful distance"), which avoids conformity and allows individuality. (Sprenger, 2015, 348) The employee is

an individual and a human being that we trust and that we grant a space so that individuality can become strengths.

VI. DISCUSSION

The results of studies from outside the healthcare sector on "value management systems" (such as "ethics management systems" or "ethics management systems – the causes of risks, the constituents and effects of corporate values programs" from the Bavarian construction industry, 2001) clearly indicate the "permanent, credible communication of values in everyday business programs" as well as their integration into "governance structures" of companies (Wieland & Prince, 2003, 36). Furthermore, interviews with organization members have shown that the influence of values programs on the "development of a culture of integrity" is perceived as a positive development (ibid., 37). Moreover, organization members see a benefit from external audits of value systems for the reliability of communication, both internally and externally (ibid., 39).

The Vincent Group is an excellent example how "cultural work" can be put into practice in healthcare facilities. Developing transfer concepts is of great importance for the whole healthcare system. Thus best practices can be models from which one can learn and which can form the basis of a transfer. Indeed, an organization needs to show a certain degree of maturity to allow a sustainable transfer. It is important that basic conditions for a culture based on values are created. Values must be entrenched at the normative level of management. They serve the strategic orientation of the enterprise and they must be brought back down to earth, onto the operative level. "Spaces" must be created in which the claimed values can be lived and in which transfer and learning is possible. "Even though being a role model is essential, it is not enough. It also requires management competence and a strategic commitment of the management." (Vincent Group, n.y.b., www)

A basic ethical argument for the establishment of a value management system is the need to move away from the objectification of people that is common in healthcare facilities ("the patient", "the doctor", and "the employee"). Therefore, value management contributes to a higher quality concerning the interaction with each other. However, it is also a matter of holding a balance with regard to closeness and distance to the individual. A balance which allows the use of the spaces created, through which value management can achieve the desired effect. What is urgently needed is an ethically based organizational culture that is effectively realized: for patients, employees, and also for the management.

VII. SUMMARY AND OUTLOOK

The experience of the Vincent Group with regard to long-term ”cultural work“ has been crowned with success which is reflected in all facilities: “Our value management system helps us to make our values perceptible to our employees, our patients as well as the occupants of our nursing homes. Values create that sense of identity and community which we need to collectively master the challenges in healthcare” *(in the original: “Unser Wertemanagement unterstützt uns dabei, die Werte unseren Mitarbeiterinnen und Mitarbeitern, unseren Patientinnen und Patienten sowie Bewohnerinnen und Bewohnern erlebbar zu machen. Werte schaffen jene Identität und Gemeinschaft, die wir benötigen, um miteinander die Herausforderungen im Gesundheitswesen bewältigen zu können.“* (Vincent Group, 2016, www) For private, non-profit healthcare facilities this also provides a competitive advantage over public hospitals, which focus on higher utilization and higher figures. Values, in the end, can also be seen in higher quality characteristics.

This article has shown clearly that “cultural work” in healthcare facilities does not only relate to behavior. It also needs the creation of organizational conditions which allow for the desired behavior or facilitate the desired behavior. The establishment of a value management system that relates to the individual (employees, patients) furthers a profound encounter with the person as well as with the imbedding organization and the community. Thus, interdisciplinary and multiprofessional cooperation are enhanced. And the ultimate beneficiary turns out to be the patient.

Worldwide there are countless best-practice examples which can be transferred to other institutions if the necessary conditions are given. For a successful transfer suitable models and instruments need to be used. The question which factors determine the transfer of good solutions, however, requires more and more profound research.

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CORPORATE SOCIAL RESPONSIBILITY – KAUTILYA'S APPROACH

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ABSTRACT

This paperwork reviewes economic system seen through the eye of Indian philosopher and polititian, Kautilya, three thousand years ago. Research work tries to analyze if philosophy can support efficiently economic science and practice. Philosophical views and perspective within economic system of a statecraft refer to values, ethics, rational thinking in the process of decision making, human welfare and citizens satisfaction in general. Philosophical approach in economic cycles can offer guidebook for socially responsible economic system, system who takes care of social standards of citizens when modeling economic policy of a state.

I. INTRODUCTION

This paper analyzes economic system seen by Indian politician and philosopher in the period around 375 B.C. Kautilya, or Chanakya was an Indian philosopher and politician who acted as a chief advisor and Prime minister of the Indian Emperor, Chandragupta, the first ruler of Mauryan Empire. He is considered as one of the authors of The Arthashastra, one of the world's oldest treaties on state economics and politics. Although the treatise presents more political and statecraft analysis, this paper concentrates on its economic system parts. Research paper is twofold. On one hand tries to highlight progressive ideas Kautilya presented in his work and questions possibility of their implementation in contemporary economic models. On second hand compares what has changed since Kautilya. Literature concerning economic systems three thousand years ago hasn't used the terms sustainable development or Corporate Social Responsibility. Nevertheless, this paper shows that main points on sustainability and social responsibility existed in the economic system described during Mauryan empire. The work of The Arthashastra presents prosperous sustainability model with many economic and political measures known today. Although the paper concentrates around ancient Indian statecraft model represented in The Arthashastra it is not the only one of a kind with philosophical approach in economics. Soumitra Sharma in his paper From a Moral Philosopher to a Poor Economist (2007) write about ethics and philosophy in economics in the teachings of Confucius in ancient China, following ancient Greece whose philosophers Plato and Aristotle advocated social equilibrium. Greek and Chinas statecraft and economic models are not questioned in this work. They are rather mentioned due to generally accepted observation that main management and economic models practiced today are the ones coming from western economies. On contrary, China, Greece or the India examples shows that similar models existed originally many centuries ago in eastern countries, although in a different form, adaptable within respective historical period.

Most of the analyzed papers on sustainable development or Corporate Social Responsibility write about first sustainability reports or models of a companies who are the pioneers in using such business models, but rather few write about social responsibility of statecraft economic model as a whole. No matter by whom it is practised the social responsibility is always about society, sustainability, environment and giving something in return. Such concept in this paperwork combines social responsibility within business companies along with social responsibility coming from statecraft. Sustainability for future generations is not possible without cohesion of the two.

Paper considers one more perspective important for sustainability, philosophical approach, applying ethics and moral in economic system. Philosophical views on the functions of economic system within statecraft refer to values, ethics, rational thinking in the process of decision making, human welfare and citizens satisfaction in general. If citizens of a state live in a regulated society, if they are able to work and support families it's a reflection of socially responsible statecraft. Philosophical approach in economic cycles should offer guidebook for socially responsible economic system, system who takes care of social standards of citizens when modeling economic policy of a state.

II. LITERATURE REVIEW

Literature review framework consists of economic system presented in The Arthashastra treatise. Philosophical approaches in economics, sustainable development and Corporate Social Responsibility review shows how such measures performed actively from different society levels can create a synergy effect in economic systems.

The Arthashastra represents gathered works on government administration system and its constituent elements, efficiently organized state, treasury with revenue and expenditure, equal to nowadays budget policy, legal system policy, foreign policy, defense and war. In short it elaborates the science of wealth and welfare. Reviewed literature in certain aspect questions Kautilya's morality or ideas he presented, equalizing him what is known as „Machiavellian", the term used for leaders and personalities who are manipulators by nature. This paper doesn't question if Kautilya was an impostor or whether the ideas he presented really reflect the society in a given historical period rather points out the progressive ideas and socially responsible statecraft model, systematically elaborated. Closing doubts on this question is systematically explained by Škare (2013): „The market mechanism, economic policy, and growth theory models that we find in Kautilya's Arthashastra cannot merely be the result of a simple social practice or process; they must instead be evidence of a complex economic process and the economic analysis of that process itself" (3).

Contemporary thoughts on philosophy in economic systems are seen in Sharma's (2007) work, within whom it's emphasized the relevance of other sciences included in economics, rather than currently prevailing mathematics. Sharma (2007) states: "Human beings want liberation in three realms: physical, mental and spiritual. Any social system must aim at helping an individual to achieve such freedom" (99). The paper advocates an urgent need for transformation of economics as a "technical science" to its origin of Adam Smith, the "social science".

Dass and Muniapan (2008) deals with the philosophy of Corporate Social Responsibility from an ancient Indian perspective starting from the fact that many academic articles cover Corporate Social Responsibility from broad perspectives but only limited ones look back into it from philosophical or historical perspective. Authors work is focused on Indian management concepts but in general addresses the point that each country has to develop its managerial practices according to the country's religion believes, historical background and cultural heritage. There's no comprehensive or unique model which can suit best each country and its population.

Kumar Das and Bharati (2012) explain in their Contemporary Corporate Governance work the difference between governance in ancient India and nowadays corporate governance. It is evident that governance and social responsibility throughout history always started with some form of a ruler (King, monarch, president) while today governance became evident mainly through corporate governance and corporation business models. Globalization and internationalization of economics supported the trend of individual in the center spot while philosophical approaches in the economic cycles became less important.

It is not only the work of The Arthashastra, ancient China or Greece philosophers who are addressing the philosophical approach in economics. After many years of stillness in the field, financial crisis from 2008 shifted the trends and triggered discussions on the new economic paradigm. Dzionek-Kozlowska (2015) questions if last economic crisis led to a scientific revolution. Each crisis no matter political or economic one, seeks for a new model of behavior. Economic research community raised question on many econometric models and scientific predictions, from whom many became irrelevant after 2008 crisis.

Contemporary scholars who write about economic philosophy mainly reflect their works on the ancient Indian, Chinese or Greek models and philosophers of a time. Research they perform is an attempt of revival and acknowledgment of the ancient eastern statecraft models from whom today's governance models can benefit. Political and economic dominance of western countries on the world's scene came out from their historical background, imperialism (colonization) during nineteenth and twentieth century as well as widespread use of English language.

When it comes to a sustainable development debate there are numerous discussions on what sustainable or corporate responsibility refers to. One of the pioneers in the social responsibility concept, Howard R. Bowen in his Social Responsibilities of the Businessman (1953), raised a research question on ethics and morality in doing business. After Bowen's (1953) cornerstone paper many scholars started their research on social responsibility.

Diverse research discussions came out after Milton Friedman's (1970) work.. Friedman stated that the only responsibility of a business is the profit increase. Furthermore, he advocates that social responsibility can be carried out only by private owners of small companies but when it comes to a corporation he argues that a manager can decide on the spending of capital of others (shareholders). Social responsibility by Friedman is on individual person's level as only individual can decide on its own morality and social sensitivity. Although each individual makes a difference and can contribute significantly, the question remains if it is possible to divide corporations in the way they are doing business nowadays from their social responsibility.

Opposite to Friedman, Carol (1991) welcomes social responsibility of companies. Fundamental responsibility of a company is economic interest holding it as a foundation for other pyramid blocks which are legal responsibilities, ethical responsibilities and on the top philanthropic responsibilities. Furthermore, the author outlines philosophy in economics through analysis of moral, amoral and immoral managers. Each should strive through morality in his appearance and work.

Sustainable development and Corporate Social Responsibility have many definitions, coming from different associations, researcher groups or scientists working on the topic. As this paper is not an in depth analysis on sustainable development or social responsibility but rather connect social responsibility performed today with social responsibility presented in The Arthashastra work the paper stands out few definitions mostly used.

World Commission on Environment and Development in the work "Our common future", also known as Brundtland report (1987), define sustainable development as: "Sustainable Development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

World Business Council for Sustainable Development define Corporate Social Responsibility as: "Corporate Social Responsibility is the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large."

Both definitions emphasize the need for social equilibrium, today and for the future generations. No matter if it is a sustainable development or corporate social responsibility measure it is always about performing both from a statecraft level down to individuals within society align with the economic forces of a country.

Kumar (2014)) write about Corporate Social Responsibility in India, the evolution of sustainable development and questions if spending in Corporate Social

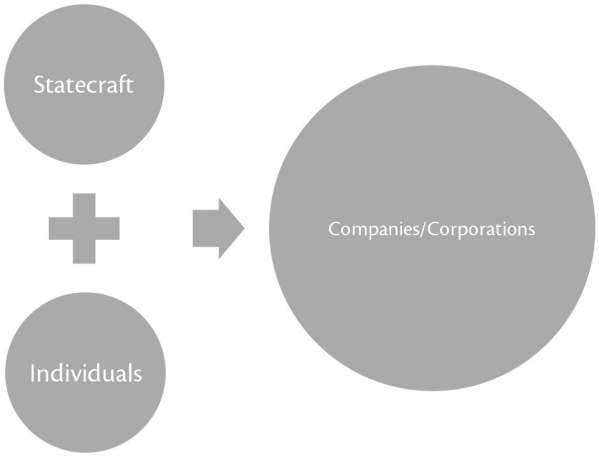
Responsibility in India should be mandatory. Indian government introduced few times measurements for company spending on Corporate Social Responsibility but each time measures where voluntary based. Only in 2013 government brought the Companies Act 2013 within whom company of certain size and profit has to invest in sustainable development for the future. The Act defines Corporate Social Responsibility of the companies but also shows statecraft brainstorming for the future as well. Instead of imposing higher taxes such law should drive companies towards development for the future. In the symbiosis like this, government as the umbrella legislative force in the country and the companies who are driving the economic prosperity should interact together as both generate social, political and economic prosperity. The question remains about transparency and follow up on the law together with measurement of the results from such policy.

III. METHODOLOGY

The paperwork presents briefly theoretical evolution of philosophy in economics with tendency to put the theory in the context of today's state performance in social responsibility. In a narrow sense it concentrates on possibility of introducing Kautily's ideas in a modern 21 century state.

Statecraft holds the first place as the King has it in The Arthashastra. Explanation for such standpoint comes from social psychology analysis who shows that individuals are modeling their own behavior by watching the others, specially leaders. Economic forces of a country refer firstly to corporations due to the high influence thy have in globalized economics today. Statecraft is a frame which moderate social, economic and legal policy of a state. From each individual is expected to live and work according to those laws, with respect to individual's religion, historical and cultural heritage. Corporations who are the drivers of economic prosperity today should take care of social component in everyday business. Only the interaction of all stakeholders can produce sustainability and greater social responsiveness.

Graph 1.: SOCIO ECONOMIC RESPONSIBILITY



Source: Author

Preface in The Arthashastra work explains that in the happiness of its subjects lies the king's happiness, and general welfare is his own welfare. Such simple observation is the main frame of The Arthashastra treatise. It is about social responsibility which is governed from the Ruler and expected from all other stakeholders included in a life of a kingdom. Framework of Kautilya's work represents the necessity for clear and strict regulations for civil and economic life within whom each individual strives towards one common goal, general happiness and satisfaction, leaving behind private interests or wishes. King and his administration can be seen as a shell or a frame within whom many small pieces should find their own equilibrium. Each statecraft for its development needs a certain model, which depends much on its historical, geographical, cultural and religious context. Literature review showed that need for new approaches in economics came out after last economic crisis when scholars and practitioners started to discuss more on the moral ethics and philosophy in economics. Contemporary world politics and economic cycles ask social responsibility and sustainable development on many levels, non-governmental organizations, corporations, think thanks, statecrafts as well as individuals.

TREASURY

Kautilya's statecraft model begins with the importance of state treasury. It is a stand point from which all activities depend on. King has to pay a special attention to it. In order to have strong state (economic and political strength) and human

welfare on a satisfactory level the state has to have secure treasury. In order to do so there's a need of balance between maintaining the law and order and government administration. State Treasury in contemporary statecrafts still holds high priority as it defines government expenditure as well as taxation policies.

CIVIL SOCIETY-LAW AND ORDER

Law and order in The Arthashastra doesn't reflect only criminal actions, it refers to respective regulations on social questions, heritage laws, regulations of relationship between man and women, woman labor market, giving special attention to moral character of government servants. Ruler's duties who should be performed through administrative servants are protection of the state (from foreign invaders), maintenance of law within state, and supporting the welfare of states citizens. Only state with moral civil servants and clearly defined legislative acts as well as penalties for embezzlement can achieve such welfare state. There's a systematic government regulation on gambling, alcohol and prostitution. Prostitution was legal and conducted through government establishment. Taxes and obligations of Madame responsible where distinctly prescribed by law.

FOREIGN POLICY-DIPLOMACY

Kautilya sees progress for a state if a King builds forts, irrigation systems, trade routes, mines, elephant forests, opens new diplomatic relations referring to commercial contracts. Countryside is the main power for the country and the welfare depends on a foreign policy. He sees decline in state's progress if similar activities are performed with more success in enemy state. He agrees on six methods crucial for successful ruler in foreign policy, listed as: making peace, waging war, doing neither, preparing for war, seeking protection, and adopting a dual policy. In contemporary states economic diplomacy is considered as a number one tool in achieving political and economic goals.

STRATEGIC ECONOMIC BRANCHES

Agriculture, cattle-rearing and trade were defined as strategic economic branches of a state. Today many economies systems are encountering problems as they are rather coping western economic models without respect to their own advantages such as natural resources, cultural and historical background or geographic region they correlate.

Agriculture dominance imposed the importance of regulating the land cultivation and irrigations systems. It is worth mentioning that agriculture came from the country recognition the need of food supply for the citizens. Penalties where

defined for private farmers not cultivating the land or leaving the land during harvest period. Agriculture land was classified by it's rainfall season and the irrigation strategy defined accordingly. State's strategy was oriented to the development of agriculture as the agriculture fills the treasury and storehouses while mines fill only treasury.

Industrial revolution, information and communication technology development, social development of entire societies made everyday life more comfortable and brought higher living standards measured through wealth, possession of material goods and general comfort. In spite of twenty first century progress, worldwide hunger, poverty and huge inequalities became a matter of discussion for many practitioners as well as researchers. Some even consider hunger as main threats for the future economic development. Twenty first century raised question on agriculture and food supply. The basic need for each individual, without whom it is not possible to generate welfare.

MANUFACTURING

Manufacturing by its nature is closely connected with country's natural recourses, its transport infrastructure, information technology development trends, innovations and regional interconnection. Development of manufacturing sector in The Arthashastra is narrowly connected to government's policies. The Arthashastra classifies manufacturing through four main categories:

- state monopolies (weapon manufacturing), state controlled industries (salt, textile), state regulated small industries (craftsman goldsmiths), unregulated craftsman (potteries). Such clear production diversification is missing in most modern economies today.

STATE BUDGET REVENUES

The model of raising the revenue in The Arthashastra shows resemblance to the contemporary budget revenue models. It consists of revenues from state property, state controlled manufacturing, leisure activities (prostitution and gambling activities defined by law with exact tax rates), taxes (in cash and in kind; in kind referees to agriculture contribution to Warehouse) and trading.

Kautilya's statecraft model allude successful state only if government presence is visible in every sphere of economic, political and social life. Such model is opposite to neoclassical economic thought dominant today within whom governance intervene is not welcomed.

Table 1.: KAUTILYA AND CONTEMPORARY STATE

	THE ARTHASHASTRA	TODAY
THEORY OF STATE VS CORPORATE GOVERNANCE	Kautilya's statecraft pillars: The King, the ministers, the people, the fortified city, the Treasury, the army, the ally. All economic activities starts from the King.	Contemporary corporate governance plays an important role in 21st century. The shareholders, the employees, the creditors, the customers, the community, the environment, the government.
PUBLIC ADMINISTRATION	Working as a public officer meant honor. Honesty and moral where expected from each individual, public officer or entrepreneur. Strict fines for embezzlement for public officials.	Civil administration mainly seen as a mean for achieving personal interests.
CIVIL SOCIETY PROTECTION (LAW AND ORDER)	Civil society security reflected through the protection of the King. Everything starts from the King. "If a thief was not apprehended and the stolen property not recovered, the victim was reimbursed from the king's own resources. If anyone's property was unjustly appropriated and not restored, he was paid its value". "Judges could modify the rate of interest, if the king was responsible for increasing the risk of loss by not providing adequate protection".	Complex legal system within whom often years are necessary to carry out justice.
ECONOMIC STRATEGY	Agriculture as dominant economic branch and treasury as a starting point of each welfare state. Clear economic strategy based on country's advantages.	Most economies today are missing clearly defined development strategy. In most cases less developed countries are trying to copy western economic models without downright analysis of its own advantages
BASIC WELFARE PROTECTION	Country Warehouse commodity supplies where obligatory. Old supplies regularly replaced with fresh ones in order to have fresh supplies and possibility of Warehouse to interfere during calamities.	Hunger in 21st century as one of main threats for future development.
TRADE	Import control policy on defined strategic domestic commodities. Salt was defined as strategic domestic commodity. Any import of salt was a subject of taxation. In parallel import of goods not strategic to state was encouraged.	Market liberalization hardly favors local manufacturing protection. Open economy process often causes national manufacturing to fall in favor of international corporation's interests.
TAXES	Tax evasion was a subject of severely punishment. In parallel, during difficult times, it was expected from the King to withdraw in favor of people welfare.	Usually only superficial measures take place without deep structural changes, like government measures who took place after 2008th financial crisis.

	THE ARTHASHASTRA	TODAY
SOCIAL PROTECTION/ WELFARE PROTETCION ON THE LONG RUN DURING CALAMITIES	Social protection during calamities Quote: „If special levies and purchases do not produce enough grain, the officers working under the Chancellor (i.e. sthanikas and gopas] shall make farmers prepare the ground, in summer, for a summer crop (in addition to the normal rainy season crop). Seeds shall be distributed (free) to the farmers on condition that anyone who neglects to take proper care shall pay a penalty of double the estimated loss“.	2008th recession, in most countries severely damaged its citizen's welfare and ended up in favor of banks creating different distortions within the society. Anomalies are not seen only through citizen's economic standard; but recognizable through variety of social disturbances.

Source: Author

IV. CONCLUSION

Statecraft through state administration and legal apparatus creates development strategies and monitor economic and financial sector of a country. Development strategies should be pointed towards sustainable development for the future while monitoring role should secure transparent follow up of financial and legal regulations.

Opposite to a monitoring role contemporary economic cycles offer governments possibility to take part in a business market, for example through bond options, and as such they are indirectly involved in business market transactions. In the same time monitoring and stakeholder role.

Neoliberalism and its extensive economic liberalization during twentieth century enhanced the private sector role in economy neglecting government interference.

Looking from a different perspective economic and social distortions during twentieth century, World wars, Great Depression, oil crisis during 70s or recent 2008 financial crisis finished with the state engagement and its interference in the market.

So, what has changed since Kautilya? The world itself changed significantly, but the government still plays the important role on the economy market, no matter the model performed or the information's presented towards public. What can be learned and implemented from Kautillya's work is the idea of unity in times of calamities, when special efforts are requested from all stakeholders, King and citizens.

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THE ROLE OF EUROPE 2020 PROJECT BOND INITIATIVE IN LEVERAGING LONG-TERM FINANCING FROM INSTITUTIONAL INVESTORS

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ABSTRACT

The importance of investing in infrastructure has significantly emerged in recent years. In the wake of the 2008 financial crisis, European policymakers were seeking to revive the capital markets and to catalyze institutional investment in support of confronted traditional sources i.e. the banking sector. This paper investigates the contribution of the Europe 2020 Project Bond Initiative since its inception as a unique credit enhancement instrument for institutional investors to the development of the debt capital market for infrastructure projects in Europe. Based on analysis of beneficiary projects in the sectors of transport, energy, and information and communication technology that have reached financial close until the reporting date, in many circumstances the project bond scheme best serves the market needs. Often however, the financing market has been overshadowed by traditional bank debt as European infrastructure projects still rely heavily on bank lending. Much of the recent work relating to the role of the Project Bond Initiative has indicated its contribution in raising awareness for the infrastructure as an asset class among institutional investors, but also suggested specific needs for incremental adjustments and optimization of the product, which should be considered by the policymakers. Despite the political willingness signaled by the European Commission, the scheme often falls short of its primary goal of stimulating capital market financing and fulfilling its main objectives.

I. INTRODUCTION

Following the global financial crisis, maintaining a sufficient funding for the massive global demand for new energy sources and infrastructure has been a major challenge for policy makers. According to the European Union's (EU) "2020 Objectives" (EIB Outline Guide, 2012), there will be a massive need for infrastructure investments in European transport, energy, information and communication networks over the next decade. The funding capacity of sovereign and municipal governments across the globe falls short of covering the demand for infrastructure projects. McKinsey Global Institute reports that bridging the gap of global funding for infrastructure would require a 58% increase in infrastructure investments from 2013 till 2030 which in turn would require virtually all countries and regions to increase their infrastructure spending in order to meet the imminent investment demand (Dobbs et al., 2013).

Infrastructure spending has shown signs of rebounding from the global financial crisis, but it has not reached pre-crisis levels in the European Union yet (Preqin, 2016). Globally, infrastructure spending was projected to grow from US$4 trillion per year in 2012 to more than US$9 trillion per year by 2025 (Abadie, 2014). Notable key drivers for such massive spending need in infrastructure include but are not limited to demographic changes, growing urbanization and increasing prosperity in emerging markets, public finance constraints in public sector expenditures, climate change, technological progress, etc. (Abadie, 2014).

The current low interest rate environment, quantitative easing (QE) and other monetary policies implied by the central banks across the globe have generally pushed investors out along the risk curve in search of higher yields. Such market behavior has posed difficulties for investors who have typically relied on government and corporate bonds to generate yield.

Infrastructure investments have become increasingly appealing for institutional investors in the recent years and have been accounted for as a viable alternative investment opportunity (Inderst, 2009). The broad definition of infrastructure (Andrews et al., 2007) includes characteristics such as essential to the society or the economy, with high entry barriers, long dated, predictable and stable cash flows often linked to inflation and operating in regulated environments with a certain resistance to business cyclicality.

To many investors, accessing the infrastructure debt market is a relatively new development and thus far investors have engaged in the asset class through listed equity or private equity fund participations (Preqin, 2016). As asset class, infrastructure debt offers investors long-term stable and predictable cash flows paired

with broad diversification via various sub-sectors and jurisdictions as well as low correlation to other asset classes and risk-adjusted returns.

Historically, bond financing has been used in countries where institutional investors (notably private sector pension schemes) have deployed capital extensively in infrastructure developments in the United States, Europe, Middle East and Australia using the wrap of monolines[1] (EPEC, 2010). As a matter of fact, the infrastructure bond market in Europe has involved the use of monoline guarantees with very few exceptions of public bonds issued without a guarantee. Following the 2008 financial crisis, many of those guarantee providers disappeared from the market as a result of deteriorated project ratings and the subsequent calls on the irrevocable financial guarantees that cover timely payment of principal and interest on the project bonds (EIB Outline Guide, 2012).

In the past, senior bonds have entertained a credit rating enhancement though a monoline wrap. As the monoline insurers (who previously guaranteed bonds issues by project companies) have become significantly less active in the project finance market and have largely exited the market post-2008, bond financing has become less appealing to the broad investor base. In absence of the monoline market, the European capital market have witnessed constrained bond structures as bond investors have been hesitant to invest in the low BBB rating range, and in part due to their own regulatory requirements (e.g. Solvency II). Once characterized as a market with a predominant use of monoline wraps, today many traditional bond investors rely on in-house capabilities and know-how to conduct due diligence, structure and execute project financing in a proper and secure manner, while being capable of providing ongoing monitoring and administrative services for their investments (EPEC, 2010).

As a result of the global financial crisis banks have been faced with stricter regulations, particularly on the lending requirements and have been confronted with growing constraints on their long-term lending capacity. Alone the implementation of Basel III regulations, which derives higher costs and higher capital requirements for the risk-weighted assets (RWA), paired with the banks' need to de-leverage their balance sheets offered infrastructure projects to be funded by not only traditional debt alone, but also including more innovative ways of funding.

In efforts to address the global investment needs for infrastructure funding

1 Monolines are legally licensed and organized as insurance companies that are permitted to offer only one form of insurance (e.g. financial guarantees). Essentially, a private insurance company with a high credit rating provides a guarantee for 100% of the senior debt ("wrap"), thereby replacing project risk with counterparty risk. As a result of the financial crisis, monoline insurers encountered massive downgrades and were perceived as uncertain. Today, we witness a very limited number of active monoliners in the market.

during times of affected EU Member States' budgets, fiscal discipline and declining project pipeline preparations, the market was preparing for a diversity of funding models in the infrastructure investment field. The necessity for a long term financing for the EU infrastructure projects has been eminent and the EIB plan has been to expand the investor base for private funding for qualified projects, while helping boost growth through job creation and competitiveness in Europe (EIB Outline Guide, 2012). In this paper, a special attention is paid to some of the landmark European infrastructure projects, which are said to help bring the EU back to sustainable growth and prosperity.

In view of the significant role of infrastructure investments towards the development of a vibrant capital market, this paper seeks to assess the increasing reliance of raising funds for infrastructure investments from institutional investors by reviewing the research data from an ad-hoc audit report (Dhondt et al., 2015). Based on stakeholder interviews and desk research within the research data, the author investigates the competitiveness and contribution of the Project Bond Initiative to the development of the debt capital market for infrastructure projects in Europe.

II. KEY CHARACTERISTICS OF THE PROJECT BOND INITIATIVE

In the aftermath of the 2008 financial crisis, the Europe 2020 Project Bond Initiative ("PBI" or the "Initiative") was presented in a period of challenging and extremely volatile financial environment. In 2010, J.M. Barroso in his role as President of the European Commission addressed the need for innovative instruments to help finance the European infrastructure projects. Among others, the main objective of the Initiative during its pilot phase is to revive and provide immediate support to the capital markets to finance the large-scale infrastructure projects as a result of the ongoing fiscal austerity and liquidity challenges in the EU member states, which appears essential for ensuring growth and competitiveness in Europe (EIB Outline Guide, 2012).

Under the Connecting Europe Facility (CEF), the European Commission (EC) helped making the Europe 2020 Project Bond Initiative becoming part of the array of debt instruments. The Initiative, which also involves a participation from the European Investment Bank (EIB), is a risk-sharing instrument created by the European Commission that was officially launched in 2012. The product has been viewed as an opportunity for re-opening capital markets as a source of financing for infrastructure projects in the areas of Trans-European Transport networks

(TEN-T), Trans-European Energy Networks (TEN-E), Information and Communication Technology (ICT) and broadband (EIB Outline Guide, 2012).

According to the EIB Outline Guide, the EC has allocated approximately €230 million for the pilot phase of PBI as follows:

- €200 million for the TEN-T sector,
- €10 million for the TEN-E sector and
- €20 million for the ICT sector

The respective allocations in all areas have been expected to contribute in excess of €4 billion in infrastructure investments thereby generating about €20 for every euro (€) invested. By providing support at the subordinated level, the Initiative through its credit enhancement is expected to absorb a meaningful portion of the risk of insufficient cash being available to service the senior debt, thereby raising the credit quality (EIB Outline Guide, 2012).

The funding of major public infrastructure in Europe has suffered from the absence of a liquid bond market for very long maturities while institutional investors continue to struggle to match their investment needs (Monti, 2010). The lack of a deep capital market paired with strong commercial banking market willing to maintain market share through aggressive terms and conditions has led to fewer public bond financing in Europe (EPEC, 2010). In the meantime, private bond placements seem to have become an attractive option for traditional bond investors in many cases of refinancing of existing banking debt instruments.

Despite its insufficient trading liquidity, those privately place notes appear captivating as many institutional investors (such as pension funds, life insurance companies and sovereign wealth funds) face long-term liabilities that need to be matched to long-term assets. Capital market funding offers a deeper investor base and a diverse market than traditional project finance debt (Bradley et al., 2012). Project bonds offer institutional investors who are looking to diversify their investment portfolios to access the project finance market by way of providing an additional source of funding for the infrastructure projects.

Through the EIB support and as stated in the EIB Outline Guide, projects are expected to have access to capital market financing and to bring additional depth to the infrastructure mezzanine funding in a straightforward manner. The level of guarantee provided by the EIB should improve the credit quality of the bonds in order to attract capital market investors to invest in infrastructure projects (EIB Outline Guide, 2012).

By design, the PBI aims at stimulating the capital market financing for infrastructure projects structured under the project finance framework, including

Public Private Partnership (PPP) schemes, enhance the credit rating of bonds issued by the project companies to a rating level attractive for investors (EIB Outline Guide, 2012).

Effectively, the Initiative facilitates a greater involvement of the private sector in the long-term capital market financing of infrastructure projects. If successfully implemented, the Initiative would be the first financial instrument to benefit infrastructure projects across several sectors and to produce higher benefits in terms of market impact, administrative efficiency and resource utilization. Such benefit would in turn apply to all stakeholders involved. Meanwhile, governments are expected to make full use of credit enhancement schemes such as PBI and expect best value for money effect for those infrastructure projects (EIB Outline Guide, 2012).

Funding facilities

The Initiative's core concept is to encourage the development of a debt capital market by attracting and facilitating a greater involvement of the private sector in the financing of eligible infrastructure projects. After being affirmed as eligible, a project is included in the Project Bond Initiative and effectively is granted a subordinated tranche (which is also called *Project Bond Credit Enhancemen*t or PBCE) to enhance the project's senior debt. By design, as a subordinated debt instrument the PBCE aims to increase the credit rating of the senior bonds by providing an up-lift of the project rating to solid investment grade[2] rating (i.e. A-AA rather than AAA rating). Such rating enhancement sho uld be based on the capacity of EIB to deliver the subordinated loans, not necessarily its underlying rating[3] (EIB Outline Guide, 2012).

The PBCE tranche is provided either under (i) subordinated loan (i.e. funded PBCE) or under (ii) a letter of credit (i.e. unfunded PBCE). In contrast to funded structure which offers a direct sub-loan to the project company, the unfunded PBCE offers an extra source of funds during construction and can be drawn in case of a cash shortfall within a set of circumstances (EIB Outline Guide, 2012).

A. Funded PBCE

The funded PBCE provides a direct loan to the project company in the form of a subordinated tranche and acts as a first loss cushion. The PBCE facility is drawn during the construction phase and then repaid during the operation phase

2 Rating agencies imply different designations consisting of upper- and lower-case letters. A credit rating higher or equal of BBB- (Standard & Poor's and Fitch) or Baa3 (Moody's) represent a relatively low risk of default, and therefore considered investment grade.

3 European Investment Bank currently holds an AAA rating.

in order to cover eligible costs in the base case and does not represent an extra funding source. Therefore, the funded PBCE generally reduces the probability of default (PD) during operation but leaves the levels unchanged during construction (EIB Outline Guide, 2012).

Acting as a "first loss piece", the funded PBCE improves the credit quality of the senior bonds. In terms of cash waterfall, the funded PBCE ranks below the senior bond but ahead of any form of equity or other mezzanine share capital (it is noteworthy that the EIB will have no right to convert the unpaid portion of the mezzanine into equity). In case of insufficient cash flows during the operation phase the mezzanine lenders would not be paid at all if the senior lenders experience non-payment. Therefore, if the reduction in net cash flow is less than the mezzanine debt service and the anticipated risk capital distributions, the shortfall would not mean a non-payment to the senior bond holders (EIB Outline Guide, 2012).

According to the EIB Outline Guide, the maximum size of the PBCE is limited to the lesser of EUR 200 million and 20% of the nominal credit enhanced senior bonds (please note that the amount of the PBCE can be limited to a lower threshold at the discretion of EIB). However, project specific requirements (e.g. gearing, debt service coverage ratio (DSCR) and/or bond life coverage ratio (BLCR)) may constrain the maximum size of the credit enhancement facility. The exact sizing is calculated as a set percentage of the senior bond issue with no ongoing limit of the size of the funded PBCE as a percentage of the then outstanding senior bond (see Appendix I).

Further, the funded PBCE carries a substantial mitigation of loss given default (LGD) as the drawn (i.e. outstanding) senior bond amount is reduced and the EIB tranche is subordinated to the senior bondholders in the terms of repayment priority and the senior bond debt service cover ratios are favorably enhanced (EIB Outline Guide, 2012).

B. Unfunded PBCE

The unfunded PBCE serves as a long-term, irrevocable and revolving letter of credit for the benefit of the senior bond holders. The letter of credit is drawn to cover construction cost overruns or other shortfalls in the funding requirement and to ensure debt service of senior bonds. If the credit line is drawn, the EIB injects funds directly into the project company under the letter of credit (EIB Outline Guide, 2012).

The letter of credit represents a set percentage of the outstanding senior bond principal at any given time. In case of indexed linked debt, the amount available under the letter of credit will move with the indexed nominal value of the debt

subject to the maximum permitted size limits as described above. This instrument also acts as a first loss piece and represents an additional source of funds. The amount drawn under the letter of credit converts into a subordinated loan, which means that previously repaid principal amounts can be redrawn in the future. The EIB acts as a standby lender rather than a guarantor to a third-party lender who provides liquidity (EIB Outline Guide, 2012).

Unlike the funded PBCE, the maximum amount is not constrained by any base case requirements, although the underlying structure needs to be sound and robust. The senior bond holders benefit from the reduction of the loss given default (as a result of the EIB subordinated tranche as illustrated in Appendix II) as well as the mitigation of the probability of default during both construction and operation phases (EIB Outline Guide, 2012).

It is important to note that both funded and unfunded PBCE act separately and cannot be combined within the same funding structure. PBCE can be though utilized both for public and private placements.

C. Project Bond Initiative portfolio

According to the Pilot for the Europe 2020 Project Bond Initiative, the European Commission introduced the PBCE as a standardized product to fund projects throughout the entire 28 Member States of the European Union (EU-28) region. In order to maintain a geographic balance, the EIB decision making on various market and project opportunities is based on the geographical spread of initial transactions with the initial projects located likely in the well-developed PPP markets of the EU.

Since its official launch in 2012 and according to EIB official website, a total of ten projects have been supported during the PBI pilot phase until the reporting date of 30th June, 2016 (as summarized in Table 1). It is noteworthy that the Commission has adopted new guidelines and priority lists for the TEN-T and TEN-E policies shortly after the official launch of the PBI pilot phase, which imposed an introduction of "core networks" compared to the original concept of priority projects. According to the EC, all projects achieved during the PBI pilot phase were deemed eligible and in line with the adopted policy.

Table 1.: Pbce projects

Project Name	Country	Area	Sector	Sub-sector	Stage	Date Closed	Issued Amount	PBCE Size	PBCE Cover
Castor	Spain	TEN-E	Energy	Gas	brownfield	Jul-13	€1,400m	€200m	unfunded
OFTO GG	UK	TEN-E	Utilities	Offshore	brownfield	Nov-13	£305m	£46m	unfunded
A11	Belgium	TEN-T	Transport	Road	greenfield	Mar-14	€578m	€116m	unfunded
Axione	France	ICT	Telecom	Broadband	brownfield	Jul-14	€189m	€38m	unfunded
A7	Germany	TEN-T	Transport	Road	greenfield	Aug-14	€429m	€85m	unfunded
OFTO Round 2A - GyM	UK	TEN-E	Energy	Offshore	brownfield	Feb-15	£339m	£51m	unfunded
Port of Calais	France	TEN-T	Transport	Port	brownfield	Jul-15	€504m	€50m	unfunded
OFTO Round 2B - WDS	UK	TEN-E	Utilities	Offshore	brownfield	Aug-15	£255m	£38m	unfunded
N25 New Ross	Ireland	TEN-T	Transport	Road	greenfield	Jan-16	€145m	€22m	unfunded
Passante di Mestre	Italy	TEN-T	Transport	Road	greenfield	Apr-16	€830m	€166m	unfunded

Source: InfraNews n.d.

Furthermore, in fact all ten PBI supported projects received an unfunded PBCE coverage, thereby benefiting from a standby letter of credit, which can be drawn if the project generated cash flows are either insufficient to cover debt service or to cover construction cost overruns for the greenfield projects. The Initiative aims at contributing to the development of the European capital market as an additional source to finance priority infrastructure projects in the areas of transport, energy and broadband networks with a clear added value (EIB Outline Guide, 2012).

Ernst and Young (E&Y) conducted an ad-hoc audit report (Dhondt et al., 2015) based on stakeholder interviews and desk research ("Audit") as of year-end 2015 providing an independent evaluation of the PBI in its pilot phase. The E&Y report renders an assessment of the effectiveness, efficiency of EU spending, relevance, EU added-value as well as the additionality of the PBCE during the pilot phase, which can help the Commission to consider proposing appropriate regulatory changes for the full implementation of the PBI program, if deemed necessary (EC Interim Report, 2013). This study utilizes the results of the Audit interviews with various stakeholder (as of July 2015) as well as desk research and analysis performed on the PBCE projects closed beyond the Audit date in order to determine the competitiveness and contribution of the PBI to the development of the debt capital market for infrastructure projects in Europe.

Debt capital market financing

The PBCE product was introduced at a time during which the capital market investments in infrastructure needed an alternative financial instrument to provide credit enhancement for bond investors. While traditional sources of private finance for infrastructure projects deteriorated due to the demise of the monoline insurers, who provided a full wrap to enhance the credit rating of a project bond based on their AAA ratings, the PBCE helps facilitate the placement of bond investments in infrastructure with institutional investors (EPEC, 2010).

Public bond financing as a form of funding has been less prevalent in many European countries as a result of the lack of a deep liquid capital market. Though, the infrastructure market has witnessed an increased volume and a growing number of institutional money flowing into infrastructure assets over the years (EIB Outline Guide, 2012).

Typically, infrastructure as an asset class appears very suitable for institutional investors due to, among others, the nature of those assets being able to produce matching long term cash flows to long term liabilities, diversification effect across sectors and regions, low correlation with other investments and business cycles, low probability of default and high recovery ratios (EIB Outline Guide, 2012).

The European project finance market, through its PBCE product, has opened up an alternative funding avenue to source financing for infrastructure related projects. The PBCE has arguably contributed to the development of the capital markets for infrastructure projects by helping mobilize additional volume of funding for the beneficiary infrastructure projects for the transport, energy and broadband sectors (EIB Outline Guide, 2012).

According to the Audit, the PBCE was issued in a time of where traditional infrastructure lenders were faced with liquidity issues, specifically in the BBB and below rating range. Further, the low interest rate environment and the absence of investment alternatives have encouraged certain investors to make a preference for the additional yield for below A- investments.

The results of the stakeholders' interview undertaken in the Audit indicate a sufficient level of expected private financing excluding the PBCE support for the beneficiary infrastructure projects. With the exception of Castor gas storage, all other projects could have been financed by either bank debt or capital markets funding without taking advantage of the PBCE credit enhancement. Faced with economic turmoil and market uncertainties, the PBCE helped the Castor project obtain a credit rating of BBB and BBB+ from S&P and Fitch, respectively, which indicated a notch upgrade above the Spanish sovereign rating at that time. The PBCE enhancement provided comfort to the market and appeared crucial for raising the overall financing of the Castor project.

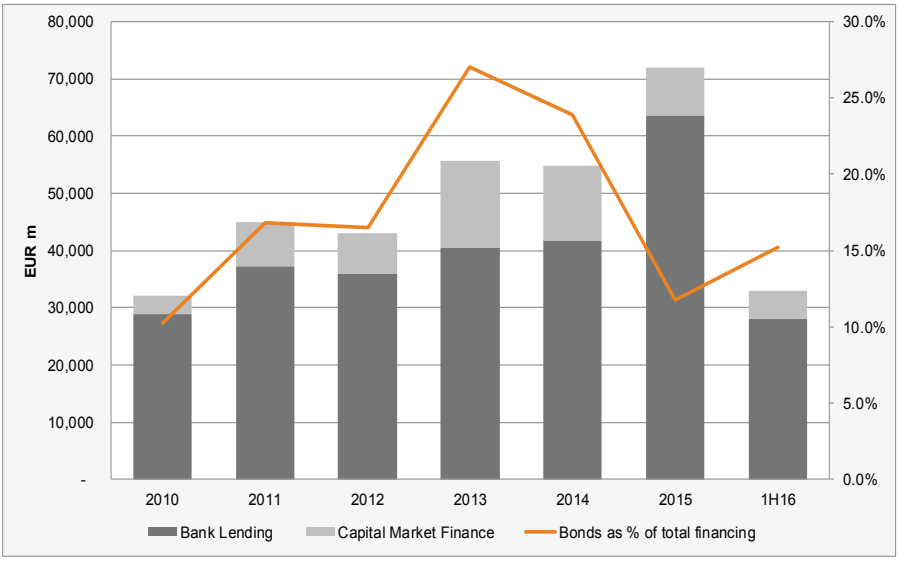
Furthermore, bank financing seems to have appeared readily available for the majority of supported projects while the offered bond financing including PBCE often implied relatively equal or even more expensive terms including but not limited to pricing, leverage, coverage ratios, structures, etc. as the data from the Audit indicates.

The capital market financing has been gradually increasing on a base of total transaction value as has the role of institutional investors. AFMA reports ca. 23%

of bond issuance in comparison to bank loans as of year-end 2014. However more recent update by InfraDeals (2016) indicates a downturn trend with bonds representing approximately 15% of total project financing in the EU-28 by end of June 2016 (as illustrated in Figure 1).

In many countries, the use of the PPP procurement model has generated a negative perception based on previous experiences while project finance models require a better understanding and technical support for project promoters (Christophersen et al., 2015). It is noteworthy the preference of procuring authorities to likely encourage investors to select the PBCE-enhanced funding route in order to achieve the lowest cost of financing using predominantly institutional investors' money in a challenging financial market that distracts governments already struggling with significant fiscal deficits (Bradley et al., 2012)

Figure 1.: total volume of project finance in the eu



Source: InfraDeals (2016)

Due to their costs, complexity and investor appetite, bond financings are well suited infrastructure transactions of a significant size (e.g. with a bond financing in excess of €100 million). According to European PPP Expertise Centre (EPEC, 2010), bonds are placed on the market either via public offerings or by private placements. Public offerings may be contemplated for very large transactions while private placements are more suited to smaller transactions as they involve lower costs and less on-going administration.

The credit enhancement under the PBCE is intended for both public bonds and private placements[4]. PBCE emerges as particularly useful on larger transaction (i.e. greater than €500 million in project size) where the EIB freely takes the facilitator role (EIB Outline Guide, 2012). With the financing of the A7 PPP motorway in Germany, PBCE placed its first greenfield (i.e. construction) financing in the transport sector. This in turn, subsequently marked the uptrend of greenfield financing by institutional investors, according to the Audit, as the bond market for private placements is considered established with a large investor base coming from continental Europe, the UK, Canada and the U.S.

The underlying idea of the PBI pilot phase is to help facilitate a debt capital market financing, which in turn would help achieve projects that are available on the market and of sufficient size. These projects shall vary across different sectors and geographies, possess investment grade rating and have different stage of development (greenfield and brownfield) (EIB Outline Guide, 2012).

As part of the EU Initiative, all beneficiary infrastructure assets have profited from the introduction of a subordinated instrument that supports senior project bonds issued by infrastructure project companies. The use of bond financing has been broadly utilized in debt capital market as the PBCE was applied in various sectors, across different geographical areas and using peculiar financing structures. While it remains difficult to estimate the potential gains from mobilizing the credit enhancement for the beneficiary projects, the presence of the EIB has brought in comfort and had added credibility to the market, thus allowing the PBCE to benefit from its involvement (Dhondt et al., 2014).

The PBCE instrument appears to have made a meaningful contribution to the development of the capital markets by offering alternative financing solutions to project sponsors and procuring authorities and raising awareness of the bond financing via institutional investors further looking into the asset class. The EC Ad-hoc Audit Report advices of a sufficiently developed private placement market of greenfield transportation projects to address current pipeline of well-structured projects. Following the downgrading of the monolines' ratings in the sub-prime crisis, many bond investors have withdrawn from the infrastructure market. Yet, the PBCE have encouraged institutional investors to re-consider financing for greenfield projects in the transport and energy sectors despite the delicate start of the pilot phase, which can be comfortably affirmed by the interest demonstrated by a large pool of investors attracted to the achieved PBI projects.

4 Traditionally, public bonds are used for larger infrastructure transactions while private placements emerge as a suitable issuance base for the smaller transactions. Listing is usually tied with an external credit rating and access to a broader investor base and liquidity.

Competitive advantage

Under PBI, the EIB provides a subordinated loans or contingent facilities to eligible infrastructure projects in the transport, energy and ICT/broadband sectors (EIB Outline Guide, 2012). Undeniably PBCE has proven its ability to produce competitive financing packages and thereby mobilize additional volume of funding for infrastructure projects in all three sectors. According to industry stakeholders' feedback in the Audit, the PBI addresses the investment gap by matching the funding demand of the large investor base of institutional investors with the supply of infrastructure projects on the market.

The following offers key findings from the assessment of the potential price competitiveness of PBCE beneficiary projects based on feedback from various stakeholders declared in the Audit as well desk review of credible market intelligence sources. See Appendix III for further details.

Castor: Strong evidence was present about the comfort provided by the PBCE facility to support the refinancing of the submarine natural gas storage facility in the east coast of Spain at more competitive terms and conditions. Yet, a bank financing could have been arranged at substantially less favorable pricing and shorter maturities, thus leaving an additional refinancing risk. Further, the Castor project would have faced a default if a refinancing package had not been proposed and later approved.

OFTO Greater Gabbard: A direct comparison of both financing solutions for the Offshore Transmission Owner (OFTO) has indicated a competitive advantage of ca. 30-35bps in favor of the bond financing as opposed to financing including traditional lenders as well as EIB providing a loan for 50% of the entire financing.

A11 motorway: Initially, the bank lending provided a better value-for-money to the public authority for delivering the project[5]. However, an EIB optimization of the bond financing (notably refined drawdown schedules, market pricing of the bonds at fixing date, fee reductions, etc.) helped scale down the financing costs to prevail over the bank solution.

Axione: The bond financing (including the PBCE instrument) was arguably the more attractive and therefore the selected financing solution for the Axione project. Yet, industry respondents reported that project sponsors were inclined to opt for the bond financing in pursuance of promoting the PBI product as a new funding source for the asset class despite the traditionally dominant role of banks in the project finance market.

A7 motorway: Generally, the German A-Models attract an extensive interest and a broader investor base due the relatively low risk profile of the assets in the

5 The procurement process allowed bidders to provide both bond (including PBCE) and banking solutions, while only the bank financing needed to be fully committed at the final bid.

transport sector. The pricing tensions within EIB on both solutions were reported to have helped the bond solution prevail over the traditional bank debt, which originally would have made a pricing difference of approximately 30-40bps following the PBCE rating uplift. The report by Mackenzie and McIvor (2014) indicates that the A7 project has also demonstrated the depth and flexibility of the capital market including a significant peculiarity, namely the diverse investor base (including insurance companies from North America and Europe alongside EIB).

OFTO Gwynt y Mor: Since the launch of the offshore transmission links by the UK energy regulator in 2009, the OFTO regime have witnessed recognition and an increased level of comfort among investors with those type of assets. A testament for the latter has been the resulted lower pricing of the Gwynt y Mor's project compared to the Greater Gabbard OFTO bond (estimated at ca. 15bps or 110bps vs. 125bps), which was supposedly devoted to the lower benchmark gilt yields as well as the increased familiarity with and investor appetite for the OFTO sector by the investors.

Port of Calais: The overall improvement of the bond financing was deemed plausible as the unfunded PBCE was believed to have brought a rating uplift worth one notch and the provided government guarantee to curve underlying demand risk of the project. Based on the available tenor of the project, it was assumed the bonds were the more competitive source financing.

OFTO West Duddon: As the third UK OFTO to be financed through an EIB project bond, the project was notably priced with a bond spread of 145bps over the gilt benchmark, which has marked an increased risk premium for an asset with a comparable tenor of 19 years and A3 rating for the two preceding OFTO projects. It is assumed that there was sufficient private financing to meet the investment needs as a result of the previous placement of offshore wind transmission assets on the UK market.

N25 By-pass: It is understood that the N25 financing has benefited from the use of the PBCE mechanism as the project bonds have been purchased from a sole institutional investor in the private placement market (InfraDeals database, 2016). According to Moody's, the presence of the PBCE has contributed a two-notch rating uplift from the standalone credit quality of the project and has provided additional liquidity if required and will also enhance recovery for senior bond holders.

Passante di Mestre: The Italian market traditionally has been reliant on relationship banks and public financing. According to InfraNews (Fabrizio, 2016), the participation of EIB and state-backed Cassa Depositi e Prestiti (CDP) provided a "political incentive" and was crucial to catalyzing private sector capital for the project. Given the EIB's support providing for a rating uplift of one a half notches

to A3, thereby surpassing the host sovereign rating (Baa2), it is assumed that the project bonds were more competitive than bank lending with reference to available tenor as well as to pricing terms and conditions.

III. DISCUSSION AND CONCLUSION

The EU priority is to explore the potential benefits of a new financial instrument to develop the debt capital market. This paper evaluates the competitiveness of the PBCE product as non-banking financing solution versus traditional, notably banking financings as well as to determine the contribution of the PBI scheme to the development of the debt capital market for infrastructure projects in Europe.

The EU involvement via the PBCE has testified to the expansion of the investor base for infrastructure investments in Europe. The PBCE marks the use of public bond markets to access financing from a broader investors base, notably geographically diversified institutional investors such as pension funds, insurers and sovereign wealth funds.

In the past, institutional investors seemed hesitant to enter the infrastructure market as risks associated with the construction phase (Bradley et al., 2012). As the credit enhancement scheme offers investors a construction risk mitigation via protection for pre-completion cash shortfalls, which automatically translates into reduced expected loss, greenfield projects such as A7 motorway project in Germany has marked the first greenfield project to make use of the PBI scheme as InfraDeals reported. Further, the ample liquidity on the infrastructure market has addressed the current needs for investment alternatives across sectors as the PBCE spotted the first offshore transmission financing (followed by two more projects later in the program) to be funded through a capital markets solution.

The underlying analysis of the beneficiary PBCE projects in this paper indicates that one cannot view the benefits from leveraging the long-term financing by institutional investors in isolation from the price competitiveness attained to the new funding source and the provided excess of liquidity.

The PBCE has arguably enhanced the sources of liquidity and competitive tension for the financing of the European infrastructure sector. The product has attracted not just more liquidity, but in many instances has also attracted liquidity at a lower price. Evidence of the latter is the competitive financing terms offered in Castor gas storage and the offshore transmission projects that have helped the bond financing prevail over the bank debt. Often the financing costs of the bond solution were more competitive than bank financing despite the favorable involvement of EIB as anchor co-lender in some projects. Equally, the PBCE solu-

tion proved to be significantly more competitive against bank debt structures as reported in the Axione and Port of Calais projects.

Bond investors typically invest in high quality assets with a low loss probability. Investors' expectations translate into arranging transactions with a credit rating in the 'A-' category or above. Since the typical project appeared to be structured to achieve a BB+ or BBB- rating, bond financings (including PBCE) are likely to involve "credit enhancement" instruments in order to achieve the necessary rating required by institutional investors. In the post 2008-crisis period and during times of uncertainties, many institutional investors were believed to have sought a comfortable buffer with respect to credit rating and the PBCE enhancement has provided the necessary rating uplift to put the investors at ease with their investment decision in the asset class (Bradley et al., 2012). As seen in the underlying analysis, the PBCE together with the subordinated debt tranche of EIB has enhanced the credit rating of all underlying projects up to three notches to a single-A range thereby improving the underlying credit quality.

Furthermore, the "all-in" price of bond financing often is compared favorably to the bank financing. Such pricing advantage can therefore contribute to improving the value for money of infrastructure projects and its affordability for the relevant procuring authority. However, increased competition in the EU-28 region has led to a downturn in credit margins since the launch of the PBI in 2012. As a consequence, the PBCE will face even fiercer competition from other funding sources while the difference in margin pricing between adjacent credit rating classes continues to decline as a result of the lower margin trend.

This EU-supported initiative assists project companies in raising funds for the infrastructure projects through a radical reduction of the funding costs whilst increasing maturities and liquidity of infrastructure finance. The EIB arguably provides support by mobilizing capital market investments in infrastructure projects in the form of tradable infrastructure project bonds while meeting the demand of institutional investors for investing in stable, long term infrastructure assets.

The EIB has a long track record of developing new investment products that has addressed the needs of the infrastructure market. Such innovative products greatly increase the financing capacity and broaden the infrastructure investor base through the European Union market as a whole. The EIB's support is used to improve the credit quality of the bonds in order to attract debt capital market investors such as pension funds and insurance companies to invest in infrastructure projects, which otherwise would not be possible without EU's support (EIB Outline Guide, 2012).

The EIB credit enhancement program enables bond financing as a competitive funding source and allows the senior project debt to be issued in the capital markets in the form of a new class of project bonds. As a result of the improving macroeconomic outlook of the EU members and first signals by debt-troubled EU countries for reverting back to economic growth, commercial banks have started to gradually return to their pre-crisis levels in terms of competitiveness. Yet, additional regulation and capital requirements imposed by Basel III and Solvency II still refrain many European lenders from providing longer tenors for qualified infrastructure projects. Nevertheless, despite the increased liquidity from institutional investors' bank lending continues to play a dominant role in the infrastructure finance market.

Market reforms to improve the supply of investments through a pipeline of economically viable projects are needed to reform European capital markets. The Audit suggests that PBI added-value is perceived as particularly high in non-investment grade projects, specifically in countries where the access to project finance is limited or affected, e.g. Southeast Europe (SEE) countries. The need for modernization and development of the infrastructure sector in the SEE region is of utmost importance for reviving the local economies and is deemed to promote growth and competitiveness at the time of current long-lasting economic crisis. New EU infrastructure policies can help institutional investors contribute private capital to the financing of infrastructure investment needs.

Some of the beneficiary PBCE projects set example for future procurements as a model to activate fresh private capital from institutional investors and effect best value for money. Though, the PBI program has still potential to effectively use the institutional money flowing in the infrastructure market. In particular, the effect of the PBI program and its added value can be further optimized by including renewable energy projects in the scope of beneficiary PBCE projects. European renewable initiatives can certainly benefit from the large amounts of private capital considering the EU legally binding greenhouse gas reduction targets and renewables and energy efficiency goals for the 2020-2030 period.

This paper argues that capital market financing is not readily available for infrastructure projects in Europe and weighs in the role of the PBI in stimulating increased involvement by institutional investors in the financing of infrastructure projects. The heavily fragmented bond market across the EU, combined with the size and complexity of infrastructure projects, stands in need of alternative and competitive source of debt financing, which can attract a broader investor base. New funding programs similar to the EU-supported Project Bond Initiative can be utilized as complimentary sources of finance that imply a sufficient coverage of the growing financing needs for the EU infrastructure projects.

Despite the EU political willingness and readiness to support the private issuance of project bonds, the underlying analysis of projects realized thus far demonstrates that the PBI financial product has made fractional progress towards the development of a vibrant infrastructure bond market, comparable in size and functionality to the U.S. and Canadian markets. Arguably, the European Commission needs to develop a clear vision for a deeper and more integrated European capital market in order to allow institutional investors to maintain and develop their role as key contributors to sustainable growth.

Even though the PBI pilot phase raises awareness among institutional investors in the asset class and helps investors to familiarize themselves with the project bond financing structure, the PBI moderately fulfill the objective of stimulating market behavior towards an increased acceptance of capital market debt financing and thus it lays out the ground for further debates and negotiations concerning a structural improvement of the EU 2020 Project Bond Initiative scheme or the implementation of any other credit enhancement programs to follow.

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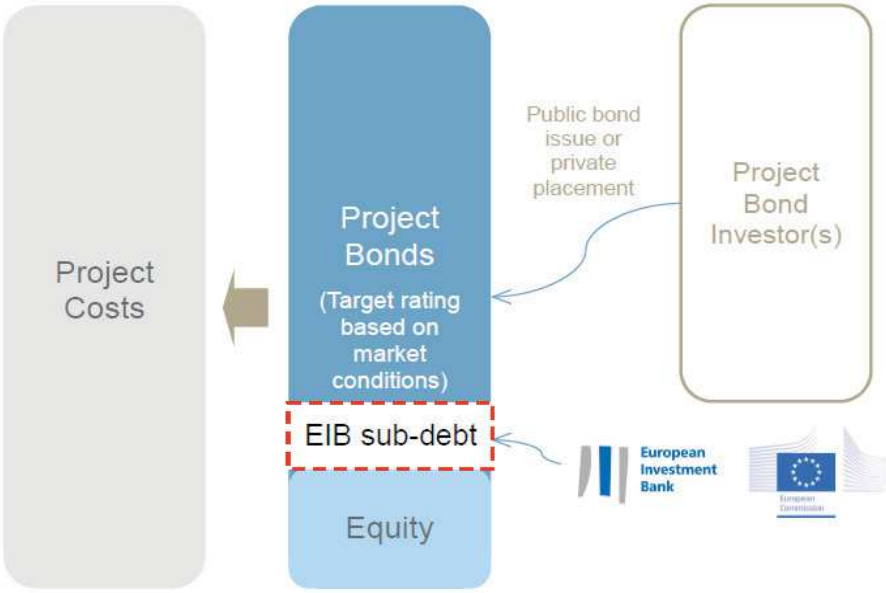
LIST OF ABBREVIATIONS

AFME	Association for Financial Markets in Europe
BLCR	Bond Life Cover Ratio
BPS	Basis Point(s)
CDP	Cassa Depositi e Prestiti
CEF	Connecting Europe Facility
DIF	Dutch Infrastructure Fund
DSCR	Debt Service Cover Ratio
EC	European Commission
EIB	European Investment Bank
EPEC	European PPP Expertise Centre
EU	European Union
E&Y	Ernst and Young
FIDEPPP	Fonds d'Investissement et de Développement des Partenariats Public-Privé
ICT	Information and Communication Technology
LGD	Loss Given Default
MW	megawatt
OFTO	Offshore Transmission Owner
PBCE	Project Bond Credit Enhancement
PBI	Project Bond Initiative
PD	Probability of Default
PPP	Public Private Partnership
QE	Quantitative Easing
RWA	Risk Weighted Assets
SEE	Southeast Europe
SPV	Special Purpose Vehicle
S&P	Standard & Poor's
TEN-E	Trans-European energy networks
TEN-T	Trans-European transportation networks
WODS	West of Duddon Sands

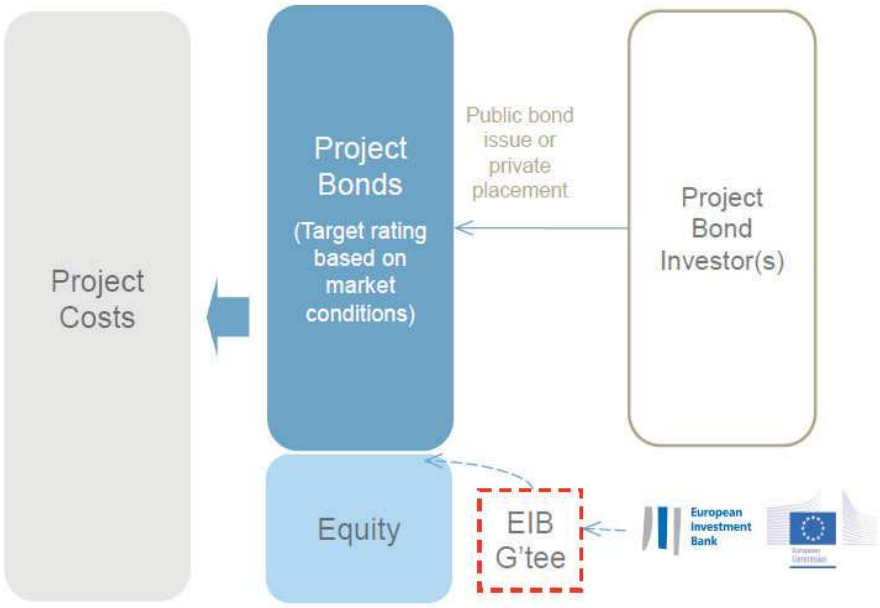
APPENDIX I: FUNDED PBCE



Sources of funds:	*Without EIB funded PBCE (EUR m)*	*With EIB funded PBCE (EUR m)*
Senior Bond	*100*	*83.3*
Funded PBCE facility (subordinated)	*0*	*16.7*
Equity	*20*	*20*
Total sources of funds	***120***	***120***

Source: EIB Outline Guide, 2012

APPENDIX II: UNFUNDED PBCE



Sources of funds:	Without EIB unfunded PBCE (EUR m)	With EIB unfunded PBCE (EUR m)
Senior Bond	100	100
Equity	20	20
Sub-total	**120**	**120**
Unfunded PBCE facility (Letter of Credit)	0	20
Total available funding	**120**	**140**

Source: EIB Outline Guide, 2012

APPENDIX III: PROJECT DESCRIPTIONS

This Appendix contains a detailed description of the PBCE beneficiary projects that have reached financial close with a cut-off date of June 30, 2016 (source: InfraDeals):

Castor Gas Storage

The Castor project marked the first infrastructure deal to be financed under the EU 2020 Project Bond Initiative. The purpose of the ca. €1.4 billion bond issue was to refinance existing debt raised by Watercraft Capital at origination. The project company is Escal UGS and comprises the following shareholders: Grupo ACS (66.7%), Dundee Energy Ltd. (24.5%) and Enagas (8.8%).

The project comprises the 30-year concession for construction and operation of a 1.9bn m3 (cubic meter) underground natural gas storage facility in the northern Spanish Mediterranean coast. The storage facility contained two platforms, compression and related facilities onshore and offshore. In 2008, the project was officially awarded to Escal UGS by the Spanish government and financial close was reached in 2010. The planned full inclusion of the storage facility in the Spanish gas system by the end of 2013 was prohibited due to an array of earthquake activities detected in September 2013. Following rating downgrades of the issued bonds and the increased level of uncertainty, the project was terminated while the Spanish government accepted the request for relinquishment of the concession made by the project concessionaire ESCAL. The €200 million unfunded PBCE that was initially granted to the project company has been discharged accordingly.

OFTO Greater Gabbard

The Greater Gabbard links project involves the operation of a high-voltage transmission line between the mainland and the Greater Gabbard Offshore Wind Farm, off the coast of Suffolk. The Greater Gabbard wind farm is expected to generate 504 megawatts (MW) and consists of 140 turbines (3.6MW each) in two zones: Inner Gabbard (367MW) and Galloper (137MW). The bond issuer is Greater Gabbard OFTO plc and is owned by a consortium comprising Balfour Beatty, Equitix and AMP Capital Investors (33.3% each). The operation of the OFTO assets and the project revenues streams thereon are based on a license from the Gas and Electricity Markets Authority and subject to performance and availability reductions.

A11 motorway

The project A11 Bruges consists of the realization of a 12 km stretch of the trunk road link A11 between the regional roads N49 and the N31. The road is one of the six major 'missing links' in the Flemish road network. It. The project involves design, build, finance and maintenance (DBFM) contract and includes a 30 years maintenance period. The project bond issuer is Via A11 NV, a special purpose vehicle owned by privately held by Via Brugge NV (60.67%) and government owned Via-Invest (39.33%). The project revenues are availability based with a respective penalty (i.e. availability deduction) system. The A11 motorway PPP in Belgium marks the first greenfield PPP project making use of the PBI project, although a portion of the total debt was also financed via bank debt.

Axione

The project involves the operation of a high-speed broadband project in France, which provides fibre services to around 20,000 new households as well as enterprises and mobile telephony sites. The purpose is to upgrade and extend the existing broadband infrastructure in rural areas by connecting local exchanges with to the national broadband system with fibre optic. Axione Infrastructure SAS owns a portfolio of 12 special purpose vehicles (SPVs) and holds 11 long-term concession contracts with French local authorities, which the company signed, designed, financed, rolled-out and operated between 2003 and 2013. The issuer of the project bond is a French securitization fund ("fonds commun de titrisation") jointly established by the shareholders FIDEPPP, a BPCE fund managed by Natixis Asset Management subsidiary Mirova (55%), as well as Caisse des Dépôts et Consignations (30%) and Bouygues Energies & Services and Axione (subsidiaries of Bouygues Construction) (15%). The Axione Infrastructures refinancing represents the first ICT project benefiting from the Europe 2020 PBI program, and the first time a project bond has been used in France.

A7 highway

The project involves the expansion, financing, operation and maintenance of the 65 kilometers stretch of the A7 federal highway between in the Northern German state of Schleswig-Holstein for a period of 30 years. The project is part of the second wave of the A-model road widening scheme in Germany. The scope of the project includes the existing motorway to be expanded from four to six lanes. The project bonds were issued by a consortium comprising Hochtief PPP Solutions (49%), Dutch Infrastructure Fund (DIF) (41%) and the Kemna Group (10%). The project receives availability based revenue streams with a respective penalty system.

OFTO Round 2A Gwynt y Mor

The project is associated with the acquisition of the Gwynt y Mor ("GyM") offshore wind farm and the related OFTO transmission assets. The wind farm is located within the Liverpool Bay area of the Irish Sea and occupies an area of approximately 79 kilometers. The GyM 576 megawatt (MW) wind farm, which comprises 160 wind turbine generators (3.6 MW each) is connected via the OFTO assets to the onshore transmission network. The bond issuer is Gwynt Y Mor plc and is owned by a consortium comprising of Balfour Beatty (60%) and Equitix (40%). The GyM asset operates under a perpetual license with a 20-year revenue entitlement period granted by the UK onshore energy regulator Ofgem. The project comprises index-linked revenues based on a minimum availability with a bonus/penalty system. As a Round 2 OFTO, the respective rewards and penalties will be transferred to the project revenue streams in the following year.

Port of Calais

The project combines the operation of the Boulogne-sur-Mer fishing port and the Calais ferry port into a single port. The expansion of Calais Port includes also building a new 3 km seawall, a 90-hectare dock, 44 hectares of new quayage, a new rail-road-sea terminal as well as road and rail connections. The financing package for the concession of Calais Port has been arranged by a consortium comprising Meridiam Infrastructure (40%) and CDC Infrastructure (40%) as private equity sponsors as well as the Chamber of Commerce and Industry Côte D'Opale (20%) representing the public sector. The Port of Calais marks the first project making use of the project bonds in the port sector.

OFTO Round 2B West Duddon

The project involves the acquisition of the West of Duddon Sands (WODS) offshore transmission assets located approximately 13 km west of Walney Island off the Cumbrian coast in north-west England. The OFTO assets connect the 389 MW West of Duddon Sands wind farm to the onshore transmission network. The wind farm comprises 108 wind turbine generators, each 3.6 MW. The bond issuer is WODS Transmission plc and is owned by a consortium of 3i Infrastructure (50%) and Macquarie (50%). The project comprises index-linked revenues based on a minimum availability with a bonus/penalty system.

N25 New Ross By-pass

The project involves the design, construction, financing, operation and maintenance of approximately 13.6 km of new dual carriageway (N25 & N30 routes)

and 1.2 km of new/upgraded single carriageway (New Ross N30) route and structures including junctions and road bridges for a period of 25 years. The N25 road forms part of the comprehensive TEN-T network. The issuer is a consortium comprising BAM PPP PGGM Infrastructure (50%) and Grupo ACS (50%). The N25 road project is using an availability-based payment mechanism. The on-demand letter of credit provided by EIB sets the first use of the PBCE mechanism in the Irish market.

Passante di Mestre

This project involves the construction of a 32km bypass near Venice, in the Italian northern region of Veneto. The proceeds from the project bonds are used to refinance the debt linked to the construction of Passante di Mestre, a toll road bypassing the city of Venice, in northern Italy. The project sponsor is Concessioni Autostradali Venete (CAV), a joint venture comprising of Italian road agency ANAS (59%) and Regione Veneto (50%). The EIB's support in the form of standby guarantee via the PBCE is the first project to benefit from the PBI scheme in Italy and also marks the first use of PBCE supporting a volume-risk project.