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Prof. Leon Pretorius, University of Pretoria, Graduate School of Technology Management, Republic of South Africa, leon.pretoriua(at)up.ac.za
CONTENTS

Alice N. Tejkalová, Filip Láb, Wadim Strielkowski. 500
SECURITY AND INDEPENDENCE OF MASS MEDIA: A CASE STUDY OF CZECH JOURNALISTS IN MEDIA OWNERSHIP TURMOIL

Zalina Shadowa, Elizabeth Tappaskhanova, Josef Abrahám, Zarema Zumakulova 509
TOURISM SECURITY AND SUSTAINABILITY: A CASE STUDY OF NORTH CAUCASUS REGION

Tatjana Bilevičienė, Eglė Bilevičiūtė. 520
INFLUENCE OF EMPLOYMENT ON STRATEGY OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION

Tetyana Mostenska, Yuriy Bilan. 536
USTAINABLE DEVELOPMENT THROUGH ENHANCED SOCIAL RESPONSIBILITY

Vladimir Jefremov, Aleksandrs Rubanovskis. 552
TOWARDS A SUSTAINABLE LATVIAN ENERGY RESOURCES AND ENERGY MARKETS IN THE CONTEXT OF THE EU

Ignas Dzemyda, Greta Zacharevič, Zlatko Nedelko. 564
SUSTAINABILITY OF INTERNATIONAL BUSINESS THROUGH TRADE SPECIALISTS’ EDUCATION
SECURITY AND INDEPENDENCE OF MASS MEDIA: A CASE STUDY OF CZECH JOURNALISTS IN MEDIA OWNERSHIP TURMOIL

Alice N. Tejkalová¹, Filip Láb², Wadim Strielkowski³

¹,²,³Institute of Communication Studies and Journalism
Faculty of Social Sciences, Charles University in Prague
Smetanovo nábř. 6, 11001 Prague, Czech Republic

E-mails: ¹alice.tejkalova@fsv.cuni.cz; ²filip.lab@fsv.cuni.cz; ³strielkowski@fsv.cuni.cz

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Abstract. Our paper focuses on the issue of security and independence of modern day mass media. The majority of mass media is owned by large corporations and business companies and there has been noted a certain pressure on the quality and the content of media coverage that is happening with a varying degree of success in various countries. Our paper is based on the results of the Czech branch of the Worlds of Journalism Study project that took place between 2012 and 2014 and consisted of 291 interviews with journalists from all types of media, both at the regional level and nationwide. The results addressed changes in the way Czech journalists perceive their roles and ethical responsibilities and showed the altering manner in which these changes are reflected in emerging media projects. It appears that Czech journalists are now keener to accept the role of public “watchdogs” and the newly found role of journalism becomes a catchy marketing idea for the new projects.

Keywords: media economics, business ownership, mass media, freedom of press, Czech Republic

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1. Introduction

The question why mass media should be independent is anchored deeply in the principle of the so-called “social responsibility” that is strong in post-Communist countries. During the period of Communist rule, the mass media was guided by the ruling Communist parties with the iron hand. Hardly any article was written or any report was made without strict censorship and ubiquitous control. This was the main reason for post-socialist mass media to become the “watchdogs” and the “voices of freedom” in the newly born post-Soviet transition economies (see e.g. Volek and Jirák 2006; Wyka 2007; or Rydzak 2008). However, the euphoria of the first years of the newly gained freedom and democracy soon gave way to the new control over mass media by private business owners that were very often represented by the large media corporations from the West. The weakening position of the transnational media owners and sales drops of their newspapers have led to sales of their Czech acquisitions to local business elites. This trend corresponds with the situation in the whole CEE region, as mentioned by Stetka (2012).
In the last two years, the Czech Republic has witnessed the largest changes in media ownership since the early 1990s. The most striking was the purchase of the prestigious and reliable daily “Mlada fronta DNES” by the business tycoon Andrej Babiš who, alongside with his business successes launched a political party called “ANO 2011”. The purchase took place in 2013, four months before the Czech Parliamentary elections “ANO 2011” came as second, which enabled it to profit the most from the situation and allowed Babiš to become the Minister of Finance and the mastermind behind the Czech political scene. Apart from that, there were noted other media purchases. For instance, the most read tabloid daily “Blesk” was bought by the financial group J&T after Babiš bought MF DNES, a step that can be viewed as a “defensive purchase” by the other important influential business owners who might not necessarily agree with Babiš. This takeover raised doubts about the nature of Mr. Babiš’s and other tycoons’ pure intentions and led to the talks about the so-called “Berlusconization” of the Czech politics, a scenario in which a powerful politician takes control of the majority of mass media in the country which enables her or him to control the public opinion effectively and very often to her or his own good.

This is not to mention that the overall atmosphere at the political scene in the Czech Republic is quite tense. Doing business in the Czech Republic is complicated and problematic, with many administrative burdens still in place. According to the latest ranking of international organization Doingbusiness.org, the Czech Republic occupies the 64th place, and is preceded by such countries as Georgia (16th place), or Peru and Columbia (41st and 42nd places respectively). Even such countries as the Slovak Republic (48th place) or Botswana (54th place) ranked higher. On top of all that, in 2011 prestigious British journal “The Economist” published an article in which it scrutinized Czech political and economic system and called it “rotting partitocracy”. According to the journals, political parties in the country hijacked the democratic process and their leaders became arrogant and corrupt (The Economist 2011). This situation might be described as the “state capture”—an excessive exploitation of public resources by the ruling elite, when the state and business start to live in a symbiosis (Grzymala-Busse 2004).

The grim climate of Czech journalism has been discussed since both in terms of its economic and ethical crises. Nevertheless, a group of influential and well-known journalists who left the media owned by business entities (after Babiš bought “Mlada fronta DNES”, other media outlets were also purchased by corporate magnates), launched projects of quality in journalism (also called "slow journalism", as a similarity to the “slow food” movement that was founded by Carlo Petrini in 1986 as an opposition to fast food concept) which represents a turning point since up until now, these projects only existed in theory. Overall, it seems that the approach to journalism in the Czech Republic, its destiny and its role in the society, is changing. However, the question is whether it is doing so for the better or for the worse. Our paper aims at analyzing the issue of security and independence of Czech mass media in the midst of the media ownership turmoil debate. The rest of this paper is structured as follows: Section 2 provides a short literature review on the business influence on mass media using the examples of various countries. Section 3 describes the data and provides a short data analysis. Section 4 brings the overview of the methodology, the research questions and the formal model. Section 5 reveals the main results and discusses their implications. Finally, section 6 comes with overall conclusions and policy implications.

2. Literature review

In general, the most typical forms of business influence on mass media can be divided into two main approaches. The first approach describes how indirect influence of business community on the stories journalists write is done via the use of money, presents, or freebies on the one hand, or via using the (often brutal) force on the other hand. This type of influence is neatly described especially in the case of various developing economies represented by Cameroon, Ethiopia, Ghana, Zimbabwe, and Indonesia (see e.g. Ndangam 2006; Lodamo and Skjerdal 2009; Kasoma 2007; Mawindi Mabweazara 2011; Hanitzsch 2005). However, even in the developed and democratic economies of the West dubious practices are still not uncommon. For instance, Muggli et al. (2004) describe the efforts of Philip Morris to put pressure on the journalists in United States and some European countries with regard to the US EPA report on passive smoking. Goldacre (2007) described the conflict of interest of journalists while writing on medical and pharmaceutical problems. For a more comprehensive overview of the issues related to the journalists’ ethics one can see Keeble (2008).
The second approach to business influence in mass media is related to the ownership structure of the mass media. In research literature, the influence and the effects of media ownership are considered to be extremely important. Many researchers agree that media ownership might influence not only the content of the media itself, but also the political and economic processes in the country in question (see e.g. Williams 2005; Stańczyk 2011; Bileišis 2014; Giriūnas, Mackevičius 2014). Houston et al. (2011) shows that the state ownership of media might be associated with bank corruption. Additionally, it appears that media concentration increases corruption both directly and indirectly through its interaction with media state ownership. State ownership of the media is strongly associated to journalists’ trust toward public institutions, which can also lead to a decline of public trust in general (see Hanitzsch and Berganza 2012; Hanitzsch et al. 2010; Bilan 2014). The research shows that in many countries concentrated ownership of media by private business entities caused a substantial reduction in the freedom of press. This is especially relevant for such countries as Ukraine, Turkey, Hong Kong, or Saudi Arabia (see e.g. Ryabinska 2011; Christensen 2007; So and Chan 2007; and Cochrane 2007; or Bilan, Y. and Bilan, S. 2011). Apart from the indirect influence on the stories published for money, freebies or threats, mass media owners have the possibility of direct influence on what, when, and how often is going to appear in the media. Moreover, owners and editors of mass media have an important influence on the deadlines of the media content (see Waters et al. 2011), the form of employment and salaries of the journalists (see Cushion 2007). Overall, it seems that business ownership can influence the mass media and the freedom of speech in journalism, in one way or another. Thence, it is important for the journalists as well as for the general public, to launch the debate on what is acceptable with this regard and what is not. Furthermore, the independence and the objectivity of mass media should also be guaranteed as being one of the most important principles of the developed democratic societies.

3. Description of the data

Our data is comprised of 291 interviews conducted for Worlds of Journalism Study project in the Czech Republic (questionnaires), in two periods: October 2012 – January 2013 (135 interviews), and September 2013 – March 2014 (156 interviews). In total, 41 interviewed journalists in our sample were from the pre-change period from the media that underwent the change of ownership or a merge with newly bought media. Moreover, 47 interviewed journalists from the after change period from the media that underwent the change of ownership or a merge with newly bought media. The Worlds of Journalism (WoJ) Project was conducted in 2007-2011 on the basis of interviews with 2100 journalists from 413 news organizations in 21 countries. Each country was represented by 100 interviews with journalists.

The concept of “News Media” in our case was limited to media organizations that have their own news program or news section, so the radio stations which broadcast music were not viewed as news media. The Worlds of Journalism study was focused on professional journalists defined as people earning at least 50 percent of their income from news media and involved in producing and editing journalistic content. The project primarily focused on the differences in journalism cultures but more interesting concepts emerged during the data collection. Currently, branches of WoJ are extended to more countries and the data collection is ongoing. For example, more date is currently collected in various post-transition economies of the Central and Eastern Europe. For more information, one can check the following website: www.worldsofjournalism.org. Our data originate from the Czech branch of WoJ. Looking at the data, some basic findings can be made: First, it becomes apparent that Czech journalists work for more newsrooms after the ownership change and the purchase of the mass media by the business company.

Second, it appears that more journalists work on temporary contracts and less on permanent positions after the medium takeover by the business entity. Moreover, at the moment the situation is that Czech journalists are working for more news outlets after the change of ownership. In addition, it appears that there is a 7% increase of journalists performing other jobs beside journalism. Furthermore, there is a noticeable increase (9%) of journalists working on various topics and subjects after the ownership change. In addition, there is a noticeable increase of produced/edited news items after the change. With all that in mind, it has to be noted that journalists’ perceived role of monitoring and scrutinizing business has risen by about 12%. Our results for the partial sample of journalists affected by the change of mass media ownership also correspond with numbers within the whole sample.
Moreover, it also has to be noted that after the changes in the Czech mass media landscape, journalists started to attribute more significance to their role of being the advocates of the social change and public morale. We notice a significant increase (23%) of perceiving entertaining role of journalism as important, while there is about a 14% rise of journalists’ feelings that their managers have big influence on the staff and the content. Many journalists reported feeling that their owners’ influence doubled in comparison with the previous era. Compared to the whole sample the numbers are almost the same. Surprisingly, the journalists have the feeling that influence of politicians did not change after the ownership turmoil. In the same way journalists do not feel higher influence of business people. Those results are the same within the whole sample.

Finally, there was noted a 10% rise in the number of journalists who, after the change from the previous period, felt that the profit-making pressure evolved and becomes less bearable. Opposite to this, there was no change in the whole sample. Overall, the data analysis demonstrates that there have been significant changes in the Czech mass media landscape following the takeover of the main Czech mass media and perceived by the journalists. The rest of this paper is targeted at measuring the scope and the scale of these changes as well as their main determinants.

4. Methodology and the model

Following the literature review, the description of the data, and our reasoning from the above sections, the following research questions (RQ) have been formulated with regard to the Czech mass media ownership change and its consequences:

RQ1: Do journalists’ working conditions differ after the media ownership change?

RQ2: How do journalists perceived the change of their roles?

RQ3: Did the pressures on journalists and their work change?

In order to test our research questions, we run the logit model in order to assess international diversity of the perceived influences of the owners to journalism practices we compute averages and 95% confidence intervals. In order to test the hypotheses presented above we compute ordinal multinomial regression according to the following formula (1):

$$\text{Influence ownership} = \text{logit} (X_1 \ldots X_n) + e$$

Where Influence ownership – the subjective level of influence from business people and media owners

$$X_1 \ldots X_n$$ - independent variables presented in Tables 1 and 2.

$$e$$ – an error term

We run two separate logit models with the subjective level of influence from business people and the subjective level of influence from media owners as our dependent variables. The perceived influence was measured on the scale from 1 to 5, with 1 being the “not influential”, and 5 being the “most influential”.

5. Main results and discussions

The results of our estimations of the model described in (1) are presented in Tables 1 and 2 that follow. For the sake of simplicity, we only depict the significant and borderline-significant variables’ estimates, their standard errors and significance intervals.
Our results (see Table 1) demonstrate a number of interesting findings. First, regarding the perceived influence of business people in general (not necessarily the media owners): There appears to be a number of personal characteristics that determine the perceived influence of business people over mass media and the journalists. For instance, it appears that the more important are the religious practices to the journalists, the more is the perceived influence of business people. This result might be explained by the fact that more religious of church-going people tend to believe in fate or providence and might expect a ruling hand to guide their deeds. Therefore, they might feel the influence of business people even if it is not there. Moreover, it appears that the more importance in attributed to the journalists ‘ethics, the less is the influence of business people. This finding is not surprising, since the more straightforward, honest and moral are the journalist, the more they believe in their own moral values and codes and the less are they interested in what business elites might think.

Additionally, it yields that the higher the salary of the Czech journalists, the less is the influence of business people. This result is subjective, of course, but it raises some interesting implications. Financial independence (higher salaries) help to be more objective in the stories journalists cover since the hungry hand would more likely be following the lines of the authority that provides the food. Another personal implication is the gender issue: it appears that being a female journalist in the Czech Republic increases the perceived influence of business people. This result might be attributed to the traditional role of women in the Czech society and the feeling of being less secure in both professional and social terms in comparison with the male colleagues.

Regarding the influence of business people, there is also an interesting implication about the geographical spread of the medium. It becomes apparent that for local media (or media concentrating just on a limited range of audience geographically), the influence of business people seems to be less important. This result might be attributed to the fact that the majority of regional mass media do not typically have any bigger fish to fry and therefore concentrate on describing the local news and events. Regarding the results on the perceived influence of mass media owners (this time we asked the journalists about the owners of the mass media they currently work or are associated with) in the Czech Republic (Table 2), more interesting implications can be made.

It appears that the political orientation of the Czech journalists have something to do with the perceived influence of the mass media owners. Our results show that the more is the political stance (the closer it is right-wing) of the journalists, the more is the perceived influence of mass media owners. Perhaps, being more independent and business-oriented also increases the awareness of the other business-like people to attempt to seize control over the freedom of mass media. Furthermore, our result about the influence of religion is in accord with those from the previous model: it appears that the higher is the importance of religion, the higher is the perceived influence of mass media owners.

Table 1. Perceived influence of business people on mass media, Czech Republic

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion: importance</td>
<td>.382</td>
<td>.168</td>
<td>.023</td>
</tr>
<tr>
<td>Ethics general: journalists should always adhere to codes of professional ethics, regardless of situation and context</td>
<td>-.597</td>
<td>.227</td>
<td>.009</td>
</tr>
<tr>
<td>Salary</td>
<td>-.262</td>
<td>.195</td>
<td>.180</td>
</tr>
<tr>
<td>Reach of medium – Local</td>
<td>-1.236</td>
<td>.692</td>
<td>.074</td>
</tr>
<tr>
<td>Gender Female</td>
<td>.803</td>
<td>.383</td>
<td>.036</td>
</tr>
<tr>
<td>Chi-Square</td>
<td></td>
<td>37.271</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td></td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.041</td>
<td></td>
</tr>
<tr>
<td>Pseudo R-square:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cox and Snell</td>
<td></td>
<td>.219</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke</td>
<td></td>
<td>.250</td>
<td></td>
</tr>
<tr>
<td>McFadden</td>
<td></td>
<td>.118</td>
<td></td>
</tr>
<tr>
<td>N =</td>
<td></td>
<td>151</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own results

504
Table 2. Perceived influence of mass media owners, Czech Republic

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political stance (left-right)</td>
<td>.195</td>
<td>.094</td>
<td>.037</td>
</tr>
<tr>
<td>Religion: importance</td>
<td>.206</td>
<td>.154</td>
<td>.180</td>
</tr>
<tr>
<td>Ethics general: journalists should always adhere to codes of professional ethics, regardless of situation and context</td>
<td>.359</td>
<td>.213</td>
<td>.093</td>
</tr>
<tr>
<td>Reach of medium – Regional</td>
<td>.834</td>
<td>.644</td>
<td>.196</td>
</tr>
<tr>
<td>Specialist vs. Generalist – Work on a specific beat</td>
<td>-.746</td>
<td>.440</td>
<td>.090</td>
</tr>
<tr>
<td>Rank of respondent – „Junior“ manager</td>
<td>.838</td>
<td>.497</td>
<td>.092</td>
</tr>
</tbody>
</table>

Chi-Square | 36,088 |
df         | 24     |
Sig.       | .054   |

Pseudo R-square:
- Cox and Snell: .229
- Nagelkerke: .240
- McFadden: .084
N = 139

Source: Own results

The argument can be the same as in the previous case – people who believe in supernatural powers guiding their way, also tend to see the guiding hand in their bosses and owners. A very interesting outcome is related to the morale and ethics: our results confirm that the higher are the ethical principles of Czech journalists, the higher is the perceived influence of mass media owners. The implications might be two-fold: First, it appears that journalists who are (or consider themselves to be) highly ethical, also tend to dig more into unlawful and indecent practices. Second, it might be that the standards for ethical people differ from those for ordinary people whose morale is not that strict. What might be considered by the regular citizens as normal and acceptable (since it is considered mundane in the Czech Republic), might be unacceptable in accordance with usual moral standards and regulations.

The result of the regional media having less influence from mass media owners from the previous model has repeated itself. There is no surprise about it – although big business players in the Czech Republic usually concentrate on controlling the regional media from the very beginning, they do not attempt to exert any pressure on what they are covering, since the local and regional media in the Czech Republic concentrate on news and issues of minor importance that are of no special importance in shaping up the public opinion on the national scale. Finally, it appears that being a specialist increases the perceived influence of mass media owners, while being a junior manager increases the perceived influence of mass media owners. These results are not surprising, since

Conclusions and implications

Our results show that following the takeover (or the purchase) of the main Czech mass media outlets by the business owners, the overall landscape has changed. It can be observed that currently journalists tend to work for more newsrooms and for more news outlets at a time.

The employment security has also changed – there are reported to be less permanent and more temporary positions. All these makes the journalists to do more other paid jobs beside journalism in order to make the ends meet. An implication to that is that Czech journalists do not specialized as much in some specific areas of expertise as they used to.

Nevertheless, our results also demonstrate that the roles of journalism and journalists in the Czech society have changed. According to the majority of our respondents, the roles of journalist should be (attributed as most important):
• Monitor and scrutinize business
• Set political agenda
• Advocate for social change
• Provide entertainment and relaxation

We noted a higher influence of the business people in general and media business owners of mass media and the pressure on journalists to work more with a purpose of yielding higher profits. Moreover, in the eyes of the Czech journalists, the influence of politicians and business people did not change. Our results tend to correspond with the current trends within the whole media landscape:

• More important role of journalists in monitoring and scrutinizing business
• Feeling of rising influence of owners over news organizations
• The perceived influence of politicians remains the same
• The perceived influence of business people remains the same
• Influence of profit-making pressures did not rise considerably

Overall, our results demonstrate that in the Czech Republic business people and business organizations represented by the private companies and corporations tend to exert certain forms of control over local mass media outlets. This might have several explanations with the most obvious one being that private business does not need bad publicity, so some pressure over journalists to ameliorate the public image of business entities is viewed as having a “higher purpose”. Business companies support the creation of their positive role in the society and shaping up their favorable image is desirable and “good for business”.

Furthermore, the role of journalists’ personal factors and characteristics also seems to be of a great importance. It appears that religious practices, being a right-wing supporter, being an ethical person both tend to increase awareness of the business people and business owners’ influence of mass media in case of Czech journalists. Younger, more specialized and female journalists feel more pressure from the business people and business owners, while older, male and multidisciplinary journalist tend to try to adjust to the new conditions and report no such feelings.

Another interesting finding is that regional and small mass media that cannot shape the public opinion nation-wide are not used by business tycoons to convey their agenda to the public, so the pressure and the reported influence in this case tend to be quite low.

Finally, it seems that the question of corruption in Czech mass media owned by the business tycoons appears to be of a special interest in the light shed by our research and would probably deserve to become a special topic of additional research in this field. It appears very interesting to determine whether journalists who tend to accept money or presents from their business owners (or the business people in general), also increase the overall perception of the subjective influence of mass media by business entities.

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TOURISM SECURITY AND SUSTAINABILITY: A CASE STUDY OF NORTH CAUCASUS REGION

Zalina Shadova¹, Elizabeth Tappaskhanova², Josef Abrhám³, Zarema Zumakulova⁴

¹,²,⁴Kabardino-Balkarian State University
Chernyshevsky str. 173, 360004 Nalchik, Russian Federation,
³Faculty of International Relations, University of Economics, Prague
Winston Churchill Sq. 4, 130 67 Prague 3, Czech Republic

E-mails: ¹zschadova@rambler.ru; ²avppalp@mail.ru; ³josef.abram@vse.cz; ⁴mmr-kbr@mail.ru

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Abstract. Our paper analyses the role of security and sustainability in tourism. In particular, we focus on the area of tourism regional development on the example of the North Caucasus region, specifically on the region of Kabardino-Balkaria. Our analysis of the security problems of tourism in North Caucasus region showed that there was a plethora of unused and unattained sustainable resources which called for the new ways of extraction and exploitation. The proper use of these resources will allow for the new levels of problem-solving. We show that the new approaches to the tourism governance in the North Caucasus require further modernization of the regional legislation which is still in its formative stages. Moreover, we emphasize that nowadays the tourist activities in the given region should adapt the new norms and principles of international law and international standards of legal security in order to be sustainable and competitive, as well as to attract more visitors and increase the well-being of the region.

Keywords: tourism economics, security, sustainability, risk analysis, international law, North Caucasus


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JEL Classifications: H55, L83, L84

1. Introduction

The importance of tourism and its role in the economic development of many countries is increasing and becoming a global challenge of the 21st century (see e.g. Kruszka 2008; GuoSheng et al. 2014; Niemczyk 2014; Lebedev 2014). The share of tourism now accounts for more than 10 percent of all global gross national income. There are many countries and regions in the world that live mainly from the revenues obtained from tourism-related businesses and activities. This applies to both small countries and the major developed countries often indicators of yield dynamics of tourism and their growth is much higher than these same indicators in some sectors of the economy. As the data in the WTO, the number of tourist arrivals per year on average over the past 10 years was 4.5%, while revenue from tourism annually grew by almost 8% (WTO, 2014).
Occupying one of the first places in the sector of services, tourism contributes significantly to the economies of the countries by creating new jobs, providing employment, and allowing raising additional funds for the state budget. Stimulatory effects of tourism development in the most important sectors of the economy are well-known and should be accounted for. With the development of tourism is increasing the tax base and receipt of funds from taxes to the state budget. In the 21st century, the socio-economic and cultural life of the majority of states and regions of the world is no longer conceivable without tourism, which is becoming one of its leading destinations, and tourist industry - is an integral part of the social behavior of the majority. Given all these circumstances, the World Tourism Organization (WTO 2014) estimates that the share of tourism in the near future to reach 11 - 12% of the national GDP. In addition, it is believed that by 2030 tourism in the world at an average annual rate will increase by 3.3% (see Dolzhikova-Polishchuk 2014).

The profitability of tourism in the economy of the countries is affected by such factors as climatic, cultural, historical and political conditions and government policies in relation to tourism. Tourism development and its results are also greatly influenced by environment of its functioning. This effect is often unfavorable. The tourism industry should always consider danger faced by tourism activities, minimize the security risks and seek to prevent potential threats. We are talking about the safety of every tourist safety of their property, as well as not harming the environment during their stay.

The security issues of travel and tourism have always been in the focus of international organizations and event managers of tourism organizations. Thus, the parliamentary conference on tourism held in The Hague in 1989 also took that into account and duly embedded it in its code called “The Declaration on security of tourism in the Charter tourism”. In 1994, WTO created the structure responsible for the quality of tourist services and the safety of their travel which explores and summarizes the experience of different countries associated with the development of measures for the security of tourism with all its underlying direct and indirect aspects (see e.g. Ritchie 2009; Tarlow 2011).

The security issues of tourism in the Russian Federation began to be engaged against sustained fashion only recently (Prudnikova 2012). Prominent Russian scientists made significant contributions to the study of this problem and its numerous implications in Russian Federation with security issues in the tourism industry remaining very important areas of research (see e.g. Pestereva et al. 2012; Ostrovskaya et al. 2013). The main goal of our paper is to reveal the dangers that tourists encounter during their holidays using the example of Kabardino-Balkaria region in the North Caucasus. Moreover, we attempt to determine all possible ways that tourism sustainability and security can be influenced upon as well as to understand its underlying factors.

2. Security and sustainability threats in tourism

Although tourism remains a very safe time-passing, various accidents are not uncommon, especially when it comes to sport tourism, such as mountain climbing, parachute jumping, diving, or other activities that are related to the adrenaline rush (see e.g. Bentley et al. 2000; Mansfeld and Pizam 2006). Mountain climbing is especially treacherous. In France and Japan, every year more than 100 tourists are killed on mountain routes, while in Europe, in the Alps, this indicator reached 300-400 people per year. Every year in Chamonix, in the district of Mont Blanc about 60 climbers are killed and more people are injured. The number of deaths, according to the data rescue services, is growing from year to year and constitutes 13-17%. Interestingly, they all happen most often with the most active, prospective and experienced tourists. Only in July 2012, in the South of Switzerland, 5 climbers died, and in June 2012 11 tourists were killed in Chamonix (Soulé et al. 2014). The experience in the development of the tourism sector in Kabardino-Balkaria, a North Caucasus region, shows that it might create a number of necessary conditions for raising the standard of living of the population, its mobility, and employment (Trapsh 2007; Apollo 2014). Tourism enables a stable economic growth of the regional economy, rational use of cultural and natural heritage, development of international contacts. Sustainable tourism development is one of the indicators of successful development of the residents of Kabardino-Balkaria (Metreveli et al. 2010; Kolesnikov 2014).
At present time, there are 232 companies operating in the sphere of tourism and resorts in the Kabardino-Balkaria region. Of these, 36 are of sanatorium-resort establishments, 21 camps, 17 climbing camps, sports centers and resorts, 89 private collective means of accommodation of tourists and vacationers in the Elbrus region, 15 hotels, and 54 travel companies. In the Kabardino-Balkaria Republic, one can simultaneously accommodate about 15 thousand tourists and vacationers. Only in 2012-2013, 48 objects of tourist infrastructure, including 14 collective accommodation facilities at 509 beds were commissioned. About 70 objects are still in an unfinished state of building. In 2013, 247.7 thousand people spent their holidays in Kabardino-Balkaria, which exceeded the planned number twice (102.4%). About 21909 children were able to be treated and relax in the country's health camps, as well as health camps sports profile, sanatoria and health resorts, tourist camps located in the Kabardino-Balkaria (see e.g. Ivolga and Erokhin 2013).

With the increasing number of tourists and increasing the role of tourism in the region, a growing number, and they become less and less predictable, both internal and external security threats (see Wills and Moore 2008). As shown by the statistical data (Table 1), in the mountains of the North Caucasus only in 2013, seven people were killed, went missing two people. Just as last year in this region were injured and maimed 86 tourists. During 2013 the regional center of the North - Caucasian EMERCOM of Russia conducted search and rescue operations are over 60. Only for the first half of 2014 in the mountains of the North Caucasus missing three people, 5 killed and 104 tourists injured. Search and rescue units went out on calls 44 times.

Table 1. The number of tourists affected by the mountains of the North Caucasus (2013 – 2014)

<table>
<thead>
<tr>
<th>Time</th>
<th>2013</th>
<th>2014 (1st half)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deceased</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Injured and maimed</td>
<td>86</td>
<td>104</td>
</tr>
<tr>
<td>No. of search &amp; rescue operations MOE</td>
<td>60</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: Own results

Increased avalanche danger, and the danger of ice-falls observed in the mountains Elbrus region, where each year several foreign as well as Russian climbers die. Tourists die and because of the lack of receipt of information on the available risk, either by the enterprises providing services to them, as well as the fault of their own. A large number of tourists get a variety of injuries. There is a repeated death of divers in Blue Lake which is located in the district of Cherek. Our analysis of the companies that provide travel services has shown that not all opportunities are used to ensure the safety of tourists (see e.g. Hall et al. 2012).

We checked 16 tourist sites (sports facilities, climbing camps, and boarding houses) of the Kabardino-Balkaria and discovered that 6 of them had a complete set of regulations that are in force today to ensure the safety of tourists. Providing tourism services, businesses of tourism of the Republic does not always provide the level of risk to the health of tourists in order to minimize it to the level of danger in committing them to travel. But the dangers are waiting for tourists everywhere, so are the sources of risk. Thus, by movement of tourists and different arrangements; hazardous sites; changes of rocks; not quite favorable characteristics of tourist equipment that it uses; adverse and sometimes dangerous natural phenomena, there is risk of injury to visitors. In order to reduce the possibility of injury visitors should wear protective devices and guards, personal protection items, and be in compliance with certain requirements of camping equipment. It is also necessary to comply with building codes in the construction of residential and public buildings and use the appropriate regulations to determine the technical condition of vehicles needed for transportation of tourists, the rules of operation of equipment used, ensuring its safe operation. It is necessary for the tourists who come to spend their holidays in Kabardino-Balkaria that full information about the risks and measures to prevent them is provided. Several impact factors of the environment that are caused by its temperature and humidity seem to have an important impact on tourists as well as the service of tourists that might suffer from changes in atmospheric pressure. In areas where tourists are served, as well as in vehicles that transport them to these places, it is necessary to establish performance climate based on established...
health and sanitation requirements. In order to ease the impact on tourists these risk factors, and ultimately reduce these impacts on not during tourist events should: rational design hiking trails; take into account the climatic conditions of the area; build on the slopes hiking shelter from the weather; premises and equip vehicles with air conditioning and ventilation; provide tourists with the appropriate equipment, including personal protective equipment. Promptly informing tourists about the natural and climatic conditions along the route is also a must. Requirements and indicators to ensure the safety of tourists from the influence of the above-mentioned risk factors and methods of verification should be carried out in accordance with GOST 12.1.004-91 entitled “Occupational safety standards system, fire safety, and general requirements” and another regulation 12.1.005-88 entitled “Occupational safety standards system, general hygiene requirements for the working area”. In the operation of service facilities shall comply with all requirements contained in the approved regulations.

On the tourists who come to travel in Kabardino-Balkaria, various risk factors, such as biological, may affect, so having this in mind it is necessary to prevent them as follows:

- Comply with established sanitary norms and rules of service;
- Use of equipment and products for disinfection, sterilization and disinfestation;
- Use safety signs and markings on vehicles and equipment facilities used to service the tourists;
- Systematically conduct medical examinations of personnel; required immunizations and disinfecting equipment and processing to meet the requirements of international medical standards;
- Inform tourists about dangerous animals and plants that may be encountered on the tourist routes of the Republic, on how to avoid such contacts and any necessary measures to be taken in such cases.

Moreover, the physiological risk factors faced by the travelers should be taken into account, and the reduction of them might be achieved through:

- Management structure of the program service of tourists, graphics move them on routes that involve the creation of the necessary conditions for the life of travelers;
- Taking into account the psycho-physiological characteristics of each visitor in the formation of the tourist group;
- Compliance with the safest and most efficient use of equipment and inventory, for tourists and vehicles;
- Inclusion in the program of tourist service active acclimatization.

As it is well known, the level of physical fitness is extremely important for the tourist prevention of accidents and injuries. This is primarily due to the fact that the human body has to adapt to the high altitude – low atmospheric pressure, high oxygen content and solar radiation. Hence, it is understandable why a set of measures of various factors faced by the travelers should be taken into account, and the reduction of them might be achieved through:

<table>
<thead>
<tr>
<th>Time</th>
<th>Tour 1 – the ascent of Mont Blanc</th>
<th>Tour 2 – climbing Elbrus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Excursion to the village of Le Tour. Raising and spending the night in a hut Albert Ler Hut (2770 m)</td>
<td>Field trip to the Tcheget. Rise to a height of 2800 m. Descent and overnight stay at the hotel “1tkol”</td>
</tr>
<tr>
<td>Day 2</td>
<td>Rise to the peak of Aiguille du Tour (3516 m). Descent and overnight stay in the village. Chamonix</td>
<td>Excursion to the glacier Gian Kuat. Climb up to the pass False Gumachi (3200 m). Descent and overnight at the hotel “1tkol”</td>
</tr>
<tr>
<td>Day 3</td>
<td>Climb up to the hut Tete Rousse (3150 m)</td>
<td>The climb to the “Shelter odinnadtsati” (4200 m). Descent and overnight stay at the shelter “Gara-Bashi” (3800 m)</td>
</tr>
<tr>
<td>Day 4</td>
<td>Climb up to the hut Gouter and overnight there (3818 m)</td>
<td>Ascent to Pastukhov Rocks (4800 m). Descent and overnight stay at the shelter, “Gara-Bashi”</td>
</tr>
<tr>
<td>Day 5</td>
<td>Ascent of Mont Blanc (4808 m)</td>
<td>Day off. The descent into the village. Azau (2800 m). Overnight stay at the shelter, “Gara-Bashi”</td>
</tr>
<tr>
<td>Day 6</td>
<td>The descent into the village. Chamonix</td>
<td>Climbing Elbrus (5642 m)</td>
</tr>
<tr>
<td>Price</td>
<td>610 EUR (2-day), 1290 EUR (6-day)</td>
<td>540-910 EUR (6-day)</td>
</tr>
</tbody>
</table>

Source: Own results based on mountain guide pricing and Lu and Stepchenkova (2012)
If there is a risk of exposure to chemical risk factors in the process of servicing tourists, the following measures should be used:

- Regularly monitor content in the atmosphere, the food, water and earth chemicals that adversely affect human health;
- Build and host facilities for accommodation and service of tourists in a favorable environment, from the point of view of chemical risk factors;
- Conduct thorough compliance of drugs used for disinfection with instructions for their use, and no tourists keep them for contacts.

There are other risk factors, which include, for example, the dangers associated with a lack of the necessary information about the services provided by the company. To reduce such risks, it is necessary to:

- To provide tourists with complete information about tourist services and to meet the requirements of current legislation;
- Carry out the necessary safety briefing for tourists, taking into account the feature of a tourist route.

The presence of specific risk factors in tourism requires that each tourist enterprise in Kabardino-Balkaria had a set of existing regulations to ensure the safety of tourists and to employees of the company guided by them in their activities. Not only it should be on every tourist organizations in the region how to develop and approve a program, but also to set the rules how to behave as staff in an emergency situation.

### 3. Empirical model

Economic theory states that the tourism demand is expected to be influenced by income and price factors. Moreover, other geographic and economic factors might come through as significant in determining tourism demand. Based on the overview of most used determinants of tourism demand and data availability, we constructed the empirical model that includes the following variables:

- **I - Income**: The measure of income is the Gross Domestic Product (GDP) of each country of tourism origin which is expressed in per capita terms.
- **P - Price**: Tourism prices express the cost of goods and services at destination.
- **TO - Trade openness**: The international arrivals are said to be determined by the level of business activities among the destination and the country of tourism origin.
- **D2001, Drecession** – dummy variables: The following dummy variables will be included in the model, in order to account for the one-off events that could possibly have affected the volume of tourism demand during the sample period.
- **TA_{t-1} – lagged value of dependent variable**: This variable will be included amongst the regressors in order to account for the effect of WoM, eWoM and repeated visits as a result of habit formation.

In order to reduce the error variances across all countries of tourism origin, the population variable is going to be included in the model serving as a scale variable. Not only the GDP, but also the dependent variable and its lagged value will be expressed in per capita terms. This allows for comparability across countries (see Song et al. 2010). For the purposes of running our empirical estimation, we have employed a balanced panel data set of annual data. There are several advantages that stem from working with the panel data. The first one is that they offer a large number of observations, resulting in more degrees of freedom reducing collinearity among explanatory variables, and thus improving the efficiency of estimates. Moreover, using this type of data allows to measure effects of variables that vary little within countries and a lot across countries (Hsaio 2003). The static panel model is represented by the equation (1):
\[ Y_{it} = \alpha + \beta_1 x_{it} + \epsilon_{it}, i = 1, ..., N; t = 1, ..., T; \epsilon_{it} = \mu_i + u_{it} \]  

(1)

where \( N \) is the total number of countries, \( t \) is a time period, \( Y_{it} \) is a dependent variable, \( x_{it} \) is a vector of all independent (explanatory) variables and \( \epsilon_{it} \) is a zero mean residual. The unobservable time-invariant individual effects, like tourist preferences, are denoted by \( \mu_i \) (Ledesma-Rodriguez et al. 2001). As pointed out by (Witt and Song 2000), static models can suffer from number of problems, for example spurious regression, structural instability and lastly do not account for the effect of changing tourists’ preferences. These problems can be overcome by a dynamic specification of the model, characterized by inclusion of a lagged dependent variable among the regressors. Dynamic panel model is represented by equation (2) (Baltagi 2005):

\[ Y_{it} = \delta Y_{i,t-1} + \beta_1 x_{it}^e + \epsilon_{it}, i = 1, ..., N; t = 1, ..., T; \epsilon_{it} = \mu_i + u_{it} \]  

(2)

In our case \( Y_{i,t} \) is the lagged value of tourism demand and measures the habit persistence or changing preferences of tourists. However, there is a problem resulting from the inclusion of a lagged dependent variable. Because \( Y_{it} \) is a function of \( \mu_i \), then so is its lagged value. That means \( Y_{i,t-1} \) is correlated with the error term. Just performing the Ordinary Least Squares (OLS) technique to estimate the model, we would get biased and inconsistent estimators.

Due to the ability of producing consistent and efficient estimates, the Arellano and Bond’s GMM estimator has been used in vast majority of tourism demand studies that specified their model in a dynamic form. The dynamic form was implemented by Garin-Munoz and Montero-Martin (2007) who measured that the habit formation can play an important role in identifying the international tourism demand in Balearic Islands. Leitão (2010) came to the conclusion after analysing the main determinants of Portuguese and Turkish tourism demand respectively. We believe that the effect of habit formation on tourism demand to the North Caucasus (represented by the Kabardino-Balkaria) is worth exploring and might play a significant role in determining its volume, our model will be specified in a dynamic form, and will be estimated using the Arellano-Bond GMM estimation method. The model will take on a log-log form, so the parameters can be interpreted as elasticities:

\[ \ln TA_{i,t} = \alpha + \beta_1 \ln TA_{i,t-1} + \beta_2 \ln I_{i,t} + \beta_3 \ln P_{i,t} + \beta_4 \ln TO_{i,t} + \beta_5 D2001 + \beta_6 Drecession + \nu_{i,t} \]  

(3)

\[ i = 1, ..., 38; t = 2000, ..., 2012 \]

where \( \nu_{i,t} = \lambda_i + \mu_i + \epsilon_{i,t} \) is a FE decomposition of the error term, \( \lambda_i \) is the unobserved time-invariant specific effect, \( \mu_i \) is the unobserved country-invariant specific effect and \( \epsilon_{i,t} \) is the error term.

Table 1. Arellano-Bond GMM estimation results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Arellano-Bond Estimator</th>
<th>Expected Signs</th>
<th>Long-run parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnTA(t-1)</td>
<td>0.62 (8.88) ***</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>lnI</td>
<td>0.39 (4.52) ***</td>
<td>+</td>
<td>1.2</td>
</tr>
<tr>
<td>lnP</td>
<td>-0.39 (-9.40) ***</td>
<td>-</td>
<td>-1.1</td>
</tr>
<tr>
<td>lnTO</td>
<td>0.032 (0.76)</td>
<td>+</td>
<td>0.050</td>
</tr>
<tr>
<td>D2001</td>
<td>0.36 (-14.64) ***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Drecession</td>
<td>-0.04 (-3.20) *</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sargan test</td>
<td>70.46 (0.426) d.f. 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autocorrelation(2)</td>
<td>-2.04 (0.62)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald test</td>
<td>2244.84 (0.00) d.f. 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: \( \alpha \)- statistics are in parentheses. (*) statistically significant at 10% level, (**) 5% level, (***) 1% level; d.f.= degrees of freedom

Source: own results

The error term is assumed to be IID with \( E(\epsilon_{i,t})=0 \) and \( Var(\epsilon_{i,t})=\sigma^2 > 0 \). In addition, \( \epsilon_{i,t} \) is also assumed to be uncorrelated with \( \ln TA_{i,t} \) for \( t=2, ..., T \) and with \( \mu_i \) for any \( t \) (see Garin-Munoz and Montero-Martin 2007).
It is important to note that the estimated parameters will be the short run demand elasticities. The long run elasticities can be obtained by dividing the estimated coefficients by \((1 - \beta_i)\) (Garín-Muñoz 2006).

The model given by equation (3) was estimated by the Arellano-Bond GMM estimation method using the STATA statistical software. At first, performing this estimation method resulted in having too many instrumental variables (71) compared to the cross-sectional sample size (in our case 38). This represents a certain problem, because having too many instruments increases finite sample bias (Garín-Muñoz 2006). To prevent this from happening, we are going to limit the lag depth and use only instruments lagged up to three periods. This reduces the number of instruments to 36. The results of the estimation results are presented in Table 1. The results show that all the estimators have the expected signs. The lagged value of the dependent variable is significant and positive, which confirms the hypothesis that the habit formation and WoM positively affect the international tourism demand in Kabardino-Balkaria. In fact, 31% of total tourist arrivals consist of tourists that return to the country after having a pleasant experience and of tourists that have been attracted by the means of WoM.

4. Interpretation and interpretation of results

The implementation of the risk-prevention tasks should be carried out in cooperation with local authorities taking part in the rescue work. For trained personnel to act in these situations is responsible managers. Any accidents involving tourists which can cause personal accident and injury and could obviously occur require a carefully thought-out, purposeful and comprehensive system of measures for the creation of such conditions, when the security of tourism becomes reliable. As examples of such activities, a Mexican program for travel safety can be used best. A similar programme on the safety of tourism developed in many other countries, such as United States. Russian tourism authorities, including Kabardino-Balkaria governments need to learn from this experience. No less important is the planned expansion of the training of managers of tourist travel, tourism organizers, instructors, lifeguards, the introduction is really a year-round training of athletes in the tourist sections, strengthening their general physical and special training, improvement of technical and tactical skills.

However, considering the security problems of tourism, tourists themselves should remember and observe the usual rules of conduct, precluding them from entering into any emergencies. Often the person is a real danger in the journey, and injuries received by them on tourist routes, is the result of his own mistakes. Individual travelers, due to the poor state of their health, increased response to the changing situation, the level of fatigue, stroke flow of emotional processes, are more prone to hazards. But the main danger, in our opinion, is inexperienced tourists, weak both in technical and tactical drill, moral and volitional training, poor discipline and poor awareness of some of the tools further aggravate the situation. With a little experience, some tourists do not know how to act in a particular situation, or know but do not know how to do it. There are tourists who know and can, but do not want and do what needs to safety, or just do not want to know what it takes to do that.

In Kabardino-Balkaria, for example, in the nearest time it is planned the development of so-called “adventure tourism”, which usually takes place in a complex geographical and natural conditions and requires effective organization for aid to rescue the tourists. Faced with the task to use the recreation complex “Valley Narzanov” in Zolsky district to organize mountain biking, trekking, rafting, caving, mountaineering, and paragliding. It is possible to organize hunting tours in the mountains and system development of fishing tourism in the rivers of Harbas, Hasout, and Ingulli. Hence, it is necessary to develop measures that take into account when providing such services, to create a safe environment, which should represent a combination of forms, methods and different ways to solve this problem.

Considering the importance of public and legal impact on social relations in the field of tourism, one should not forget that there are limits to government intervention in the activities of the tourism industry. Legislation on tourism security includes a number of federal laws, normative legal acts of the Russian Federation and the subjects of the Russian Federation regulating social relations that arise regarding the safety of tourism between the tourists and other stakeholders of the tourism sphere, and authorities.
In the economic literature, legislation on the safety of tourism on the structure is considered in a narrow and in a broad sense. In a narrow sense is proposed in the legislation to include the rules and regulations of the Russian Federation legislation on tourist activity regulates relations in the following areas:

- Implementation and protection of rights and interests of tourists, providing them with security in Russia and abroad;
- The establishment of the conditions of the tour operator activities, including procedures for establishing and maintaining the uniform federal register of tour operators, the use of financial security tour operators to protect the property interests of tourists;
- Definition of informing tourists about the threat to their safety at the seat to make the trip;
- Establishment of procedures and implementation of the classification of tourist facilities, accreditation organizations engaged in the classification;
- Develop and implement standards for services in the field of tourism and tourist activities;
- The organization of activity instructors conductors;
- Self-regulation of tourist activity.

If taken in a broad sense, safety legislation on tourism includes a set of regulations in various industrial branches, aimed at ensuring the national security of the Russian Federation or any of its forms (situational relations) and which contain certain rules relating to the safety of tourism. We are talking about the Federal Constitutional Law of 30 May 2001 № 3-FCL “State of Emergency”; Federal Law of 27 December 2002 № 184-FZ “On technical regulation”; Federal Law of 21 December 1994 № 69-FZ “On Fire” and others). The implementation of tourism policy is carried out through the following basic mechanisms:

- Creation of the concept of tourism development;
- Preparation and adoption of targeted programs for the development of individual territories and states;
- Adoption of measures to achieve the target plants.

Order № 1230-r of the Government of the Russian Federation approved the concept of the federal target program “Development of domestic tourism in the Russian Federation (2011-2016)”, which defines the legal acts aimed at improving relations in the tourism sector. The government has recognized the tourist activities of one of the strategic sectors of the Russian economy. State law regulation of transport services is based on the Air Code of the Russian Federation from 19.03.97 city, and at the international level - the Warsaw Convention for the Unification of Certain Rules of air transportation from 10/12/29, the Hague Protocol and amendments thereto from 28/9/55, the procedure for land transport is governed by the law of the Russian Federation dated 25.08.95 “On the federal railways”, railway Transport Regulations of the Russian Federation of 08.01.98, “Rules of the provision of services for passengers” from the decision of the Government of the Russian Federation of 11.03.99 year, the Berne Convention for rail transport of goods and passengers by 1980. Legal regulation of tourist activity in the Kabardino-Balkaria is the law of the Kabardino-Balkaria 29.02.2008 No. 14-RA “On tourist activity in the Kabardino-Balkaria”, which relies entirely on the rules and regulations of the Russian Federation legislation on tourist activity.

However, the analysis of the problems, which allows providing security in the field of tourism in Kabardino-Balkaria, showed that the regional legislation, as opposed to federal one, little progress in addressing security and tourism is still in its formative stages and requires further modernization. Moreover, the application of security measures in the country is irregular. It is necessary to systematically analyze and update practices to ensure the safety of tourism. The region is inadequate budgetary allocation to security of tourism in general expenses for the development of tourism. Modernization of legislation in the field of tourism should lead to the optimization of the structure of government, defining their areas of activity, the functions and powers, increase the size of the appropriations to be allocated in order to ensure the security of tourism and adopt other necessary political, legal and organizational solutions.
Conclusions and policy implications

Considering the security problems of tourism in the country, it should be noted that it is not quite correct to shift their decision on the shoulders of the state. Active participation in the solution of this problem should take the entire population, thus helping the authorities and law enforcement agencies. This should be a worry, first of all, of the owners of hotels and hostels.

Network owners of hotels in the North Caucasus should provide job descriptions of private security companies protecting public order and system interaction with the ATS. All entrepreneurs should determine the choice of the private security industry. Especially it concerns the area of the Elbrus region. Video surveillance systems must be installed in all the hotels and inns. It should also install additional cameras in areas of federal road that runs along the gorge. Attention must also be organized to provide entrepreneurs bring tourists to the location of the provision of a list of vehicles and the list of drivers, as well as the formation of the dispatch service.

For maximum safety of tourists and visitors of the Elbrus region, from our point of view, the villages of Elbrus should be under the administration of organized rescue service, involving for this purpose rescue workers cableways and ensuring a high level of the round-the-clock security. To provide control of the clearing of the village Azau Baydaevka which is located in the upper reaches of the Elbrus region, it would be correct to create an emergency response team (RRT) to open one office in the village of Elbrus in the same part of the duty to organize. Another office it would be advisable to establish in the village of Elbrus, which will comply with the control in the village Tegenekli, as well as in the gorge Adil-Su.

One also needs to create an effective system in the country to inform tourists about available normative such as legal acts in this area, threats to their security in the region (location) during a temporary stay; timely information to the appropriate officials of the events and accidents with tourists on forbidden places in the territory of the Republic and its individual areas (border areas, nature reserves, avalanche danger, and others), as well as information on how to obtain a permit and what organization to visit in such areas for its issuing.

In this sense, an important role can be played by the tourist information centers (TIC) which are especially necessary in order to collect, compile and disseminate information on all resources: tourism, socio-economic, cultural, historical, and dissemination of information on best tourist offers of the Kabardino-Balkaria and to dangerous situations that may arise in their way. Centre should cooperate with organizations: public, commercial, professional associations, the media and various publishers. The Center for the tourists must operate a hotline, which allows them to obtain emergency assistance in the event of any dangerous situation. All of these measures should be aimed at improving the safety of tourists coming to the Kabardino-Balkaria, and ultimately, to improve the quality of service. The experience with operating such centers in many Russian cities and regions shows that these activities fill tourism market, and offer a higher level of comfort and safety.

It is necessary to recognize the fact that the nowadays the Russian tourist market with its regional tourism markets is an integral part of the global system of tourism. Hence, in order to effectively apply the tools of administrative and legal regulation in the Russian Federation, the Russian laws related to tourism are not enough. The regulation requires a holistic approach which should also include the elements from the international laws on tourism and tourism-related activities.

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INFLUENCE OF EMPLOYMENT ON STRATEGY OF SUSTAINABLE DEVELOPMENT IMPLEMENTATION

Tatjana Bilevičienė¹, Eglė Bilevičiūtė²

¹² Mykolas Romeris University, Ateities 20, LT-08303, Vilnius, Lithuania

E-mails: ¹tbilev@mruni.eu; ²eglek@mruni.eu

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Abstract. Sustainable development, covering economic, social and environmental development, is gaining increasing significance in the modern world. According to the modern concept of sustainable development, quality of life interaction result of social, economic and environmental factors. Social policy is an integral part of economic processes, and it shall be given priority policy attention. Guaranteeing equal opportunities for employment are very important factors contributing to the full participation of citizens in economic, cultural and social life and their potential implementation. State's prosperity depends on its economic and labor market policy, the ability to guarantee the income of population. Increasing the employment rate is the most effective economic growth and social inclusion means of promoting the economy. The efficient functioning of the labor market is influenced by many internal and external factors. The Employment Guidelines are the part of the European Employment Strategy and background of measures in line with sustainable strategy goals, preparation and implementation. The research analyzes the impact of quality of employment on quality of life.

Keywords: employment, quality of employment, quality of life, sustainable development, Lithuanian sustainable development strategy


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JEL Classifications: C1, J2, Q01

1. Introduction

Economy firstly is the social process involving the social actors: people, social groups, institutions and the state. European Union (EU) citizens’ live and work is changing rapidly, the risk that the social security system will become unsustainable is increasing (Ercey 2012; Giriūnienė 2013; Caurkubule, Rubanovskis 2014; Smaliukienė 2014; Rakauskienė 2014; Vasiļiūnaitė 2014). This process is related to the European and international economic integration, to the creation of new, particularly information and communication technologies, to the demographic aging of European societies and to the still relatively low average employment level (Wahl, Prause 2013; Caurkubule, Rubanovskis 2014; Tarabkova 2014). Sustainable development, covering economic, social and environmental development, is gaining the increasing significance in the modern world. In order that country
would have development, it is increasingly important to take the appropriate steps to help ensure the desired human life (Čiegis and Pečkaitienė 2013, Rakauskiene 2014).

The objective of sustainable development is to ensure adequate personal’s life quality, to seek social welfare and security, wisely combining economic, social development and environmental protection goals. Social policy is one of the economic regulatory measures. Čiegis and Ramanauskienė (2011) argues that forecasting the economic growth, it is necessary to evaluate the importance of the principles of sustainable development by providing that economic growth would not take place of the expense of social and environmental dimensions. Only the uniform economic, social and ecologic environments’ development can create welfare in state. “The Sustainable Development Strategy primarily addresses following issues: quality of life, intra- and inter-generational equity and coherence between all policy areas, including external aspects. The strategy underlines the role of economic development as a starting point for facilitating the transition from the current to a more sustainable society. The EU Sustainable Development Strategy also recognizes that investments in human, social, and environmental capital as well as technological innovations are the prerequisites for long-term competitiveness and economic prosperity, social cohesion, quality employment, and effective environmental protection” (Ziolkowska and Ziolkowski 2010).

On EU level the difficulties are arising in order to unify the important long-term goal of sustainable development, which focuses on quality of life, intergenerational equity and the long-term viability of European society, and the Lisbon Strategy medium-term goal of growth, competitiveness and employment (Commission of the European Communities 2007). According to the modern concept of sustainable development, the quality of life is the result of interaction of social, economic and environmental factors (Juozulynas et al. 2011). Social processes are inseparable from economic factors. In 2011 the new European Union (EU) growth strategy Europe 2020 was declared. The new strategy emphasizes on social policy priority, particular attention is paid to work and employment, to human resources’ development. “Europe 2020 puts forward three mutually reinforcing priorities:

- **Smart growth:** developing an economy based on knowledge and innovation.
- **Sustainable growth:** promoting a more resource efficient, greener and more competitive economy.
- **Inclusive growth:** fostering a high-employment economy delivering social and territorial cohesion.” (European Commission 2014).

To ensure the equal opportunities is one of the key goals of a democratic society. Cancellation of discrimination forms is the necessary and essential condition to ensure the rights of every human and personal well-being. Guaranteeing the equal opportunities for everyone, the employment is very important factor contributing to the full participation of citizens in economic, cultural and social life and their potentials’ implementation. In order to ensure the well-being and reduce the risk of social exclusion there is the need to modernize social protection system, to attract more people into the labor market and to keep them by implementation of active labor market policies. Priorities and principles of Lithuanian National Sustainable Development Strategy (Government of the Republic of Lithuania Resolution… 2003) are presented in the light of the Lithuanian national interests, identities, the renewed EU Sustainable Development Strategy priorities, and of other program documents. These are: climate change and clean energy production, sustainable transport, sustainable consumption and production, natural resource protection and management, public health, social inclusion, demography and migration, global poverty and sustainable development challenges. Social development is analyzed only by the priority social development aspects - employment, poverty and social exclusion. Employment was and is one of the major components of European Union's Lisbon Strategy, which aims - to make the EU a competitive and dynamic knowledge-based economy in the world, capable by sustainable economic development to keep creating more and better jobs and greater social cohesion (Aleksandravičius and Raupelienė 2012). The employment guidelines are the part of the European Employment Strategy and implementation background of measures in line with sustainable strategy goals (Commission of the European Communities 2009).
Implementing the strategies connected with labor market, the Member States will continue to implement measures aimed to involve in labor market women, older people, young workers and migrants. The Member States in order to address these challenges develop guarantees of flexibility and employment, which provides a sustainable approach to flexible work contracts and appropriate support for person. In addition, Member States should continue to work on developing comprehensive lifelong learning strategies, effective labor market policies and modern social security systems (Commission of the European Communities 2007).

Employment policy carried out in Lithuania according to the EU’s employment policy and strategic guidance and it is combined with goals of Lisbon, and both now - to the EU 2020 strategies. Lithuania has adopted the program documents containing the aims, setting tasks and providing basic tools how to increase employment and reduce unemployment in the country. In 2011, Government of the Republic of Lithuania adopted the National reform agenda. This agenda summarizes the main structural reforms in Lithuania removing obstacles to economic growth and to the quantitative framework of the Europe 2020 objectives. The document is built on the developed Lithuania progress strategy “Lithuania 2030” and implementing the provisions of the 2010 EU Council's commitments, integrated EU growth and employment policy guidelines (Aleksandravičius and Raupelienė 2012). Within the project “Creation of Lithuanian residents’ quality of life measurement indicators system and evaluation models” the Public Opinion and Market Research Center Vilnorus by order of Mykolas Romeris University conducted the study “Population labor, employment and entrepreneurship”. The article analyzes the results of the study, characterizing employment and quality of employment.

2. Employment as part of sustainable development

In the social area the state has for every citizen willing and able to work to create the opportunities by their work to secure an adequate standard of living. An effective employment policy must be implemented, the universal access to lifelong learning system should be developed. This would ensure a changing labor market meets the needs of the workforce, allowing to maintain a stable, high employment (Government of the Republic of Lithuania Resolution...2003). Employment policy is understood as a system of state legal, social and economic measures aimed at ensuring full, rational and efficient employment. External factors such as policy, legal and educational system, market, infrastructure, natural resources, social values and organizational models, have the influence on increasing of employment in terms of sustainable development (Aleksandravičius and Raupelienė 2012).

Scientists, policy makers and practitioners of European countries in the last decade, discussing the achievement of full employment, less are talking about the reduction of unemployment and the natural unemployment achievement, but more - about the population activity and employment rates increase, rational and efficient use of labor resources, labor productivity and work quality improvement. EU enlargement, globalization, labor migration, rapid technological changes, such the demographic threat as public (residents) aging and declining birth rates, climate change and related with it economic restructuring force the politicians to decide what methods and promoting mechanisms are appropriate to facilitate the labor market and to increase employment. The last economic crisis has affected not only the economy of the European Union, but also the social sphere, labor market and employment. In Europe as a result of the crisis, unemployment has increased from 7.1% in 2008 to a record high - 10.9% in 2013. Given the fact that the economy is recovering and the net jobs are created not at the same time, it is forecasted that the unemployment rate will decline in the near future, slowly (10.4% in 2015) (European Commission 2014). 2013 year Report of Employment of European Commission states: “Unemployment has reached unprecedented levels in the EU-28. Developments over time have been more or less similar for different groups on the labour market, with a few exceptions. First, youth unemployment seems to be more responsive to the business cycle in general. Second, when the crisis hit there was a faster rise in unemployment for men than for women, mainly because “male dominated sectors” were most affected. This is apparent from the larger jump between 2008 and 2009 for total unemployment than for female unemployment. As for structural differences, youth, low skilled workers and third-country nationals2 suffer from much higher unemployment levels.” (European Commission 2013).
Lithuanian Department of Statistics (www.stat.gov.lt) and the European Union’s statistical office Eurostat (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Main_Page) provide indicators that are typical of employment. Authors have analyzed the dynamics of employment indicators (see. Fig.1). In different EU countries different trends are dominated, so Lithuanian state is compared with the best (perfect condition) and the worst (critical condition) EU indicators in the corresponding year. Analysing of statistical data showed that, since 2008, not only critical, but also ideal long-term unemployment and the unemployment rate values in the EU steadily increased. However in Lithuania, these indicators since 2010 improved. Lithuanian employment rates almost always occupy an intermediate position between the best and worst. The European Commission found that the unemployment rate fell mostly in the Baltic countries, Ireland and Hungary. Such differences are more or less in line with GDP developments in the Member States. In order to maintain economically strong, stable and competitive position in the region, the European Union forms the common policies implemented in all EU member states. European Commission recommends (Commission of the European Communities 2008) to ensure an integrated active inclusion work policies, in order to effectively remove issues of multiple poverty and social exclusion.

![Fig. 1. The unemployment rate and long-term unemployment rate in the EU and Lithuania](image)

**Source:** Own calculations based on: Eurostat Database. Available on the Internet: <http://ec.europa.eu/eurostat/data/database>

Lithuania will follow these priority courses of action to increase employment:
1) To encourage job creation and job demand;
2) To provide the labor market with skilled labor force;
3) Formation of an inclusive labor market;
4) To provide opportunities to harmonize family and work commitments (Government of the Republic of Lithuania Resolution… 2003).

Quality of employment is a function of many factors. Mostly it depends on the employee's personal needs and circumstances; it has to apply the criteria that are completely subjective, such as job satisfaction, career opportunities, job stability, level of responsibility, interesting work. Other important factors are the quality of management, employee effort and merit recognition, training and development opportunities, work and leisure balance and relationship with colleagues. Evaluation of quality is often subjective. It can vary even within one
country depending on income level (Anderson et al. 2010). Quality of employment is closely related to a competitive knowledge-based economy and aspiration. Quality is related and with job characteristics and the wider labor market concept. It encompasses intrinsic job quality, skills, lifelong learning and career development, equality, health and safety, flexibility and security, inclusion and access to the labor market, work organization and work-life balance, social dialogue and worker involvement, diversity and discrimination lack, common working activities. “The EU’s Europe 2020 strategy for smart, sustainable and inclusive growth includes a commitment to fostering high levels of employment and productivity. This implies a renewed focus on the goals of the earlier Lisbon Agenda – ’more and better jobs’. More jobs are needed to address the problem of lengthening unemployment queues, which are approaching levels in some Member States that pose a real threat to social peace as well as sustainable economic growth. But Europe also needs better, more productive jobs if it is to succeed once again in increasing living standards for its citizens in an expanding, integrated global economy.” (Employment polarisation and job quality in the crisis 2013). Lithuania sixteenth government 2012-2016 years program (Seimas of Republic of Lithuania…2012) states that growth of number of new and better jobs would allow stopping the outflow of skilled labor abroad. 2014-2020 Program of Increasing of Employment has been prepared in order to systematically address the pressing issues of current employment problems (Government of Republic of Lithuania Resolution…2013).

3. Empirical research methodology

Mykolas Romeris University research group in 2013-2014 years implemented the project "Creation of Lithuanian residents’ quality of life measurement indicators system and evaluation models”. During the project there were identified groups of indicators, one of which - work and employment, from which the other indicators of standard of living depend on largely. Public Opinion and Market Research Center Vilimorus during April 11-23’2014 by oreder of Mykolas Romeris University conducted the study “Population labor, employment and entrepreneurship.” Number of respondents N = 1002. The object of research: 18 years and older Lithuanian population, the survey method: an interview at the respondent's home. Selection method: multi-stage random sampling. Selection of respondents was prepared so that each resident of Lithuania should have an equal chance of being heard. The study took place in 20 cities and 29 villages. This article presents the results of carried out analysis part concerning “Population work, employment”.

Research objective: To evaluate the quality of employment and employment impact on quality of life.

Research methods: the statistical analysis of the data. There was applied descriptive statistical method, communication analysis (Pearson’s chi-squared test ($\chi^2$) calculation), correlation analysis (Spearman correlation coefficient calculation). Pearson’s chi-squared test was applied for the calculation of nominal and ordinal variables, Spearman correlation coefficient was calculated by determining the ordinal variables connection.

4. Results of empirical research

There was done analysis of employment scale (does respondent not work, work full time and work fewer or more than one place full time), the nature of work (permanent work, fixed-term contract, hourly, seasonal work, other paid employment), the labor sector (public, private, both the public and private), opportunity to work according the profession (had to re-skill, work is partly consistent with the speciality; work according their profession, and not according to their specialty; work according to their specialty) dependence on sex, age, locality and marital status. Pearson’s chi-squared test ($\chi^2$) calculation was applied for determination of dependence. Results are presented on Table 1.
4.1. Analysis of employment-scale dependences on demographic indicators

Analysis of research results showed that 41.3% of respondents — didn’t work, 8.8% - worked less than one full-time place, 44.1% - worked on one full-time place and 5.8% - worked more than one full-time place. Pearson’s chi-squared test ($\chi^2$) calculation shows that employment rate doesn’t depend on the sex. This confirmed the European Commission’s view that in Lithuania men and women are employed equally. However, the employment rate depends on age, residence and marital status (see. Table 1). The least no-t employed respondents are from 30 to 49 years age. Most of these respondents are working full-time. More than on one full-time place mainly from 30 to 39 years respondents are employed. 41.2% of young respondents (up to 29 m.) and retired respondents don’t work. It can be noted that although 68.6% of respondents from 60 to 69 m. don’t work, but 23.5% of these respondents are employed full-time or more than one full-time place. Employment rate varies according to locality. The analysis of employment by place of residence showed that mostly respondents living in the countryside or in a rural area (less than 3,000 pop.), and in the five largest cities of Lithuania are employed. Here 42 to 45% of respondents have full-time work. The worst employment of respondents is notable in small towns (from 3000 to 5000 pop.). Here the largest part of respondents (66.7%) does not work, the least part of the respondents (19%) are working as full-time employees, there are no respondents working in more than one full-time place. Mostly married respondents (52% are working as full-time, 7.3% have more than one full-time place), and respondents who live with a partner (54.6% are working as full-time, 7.2% have more than one full-time place). Mainly unemployed respondents (51.7%) are among those who live alone.

4.2. Analysis of the nature of work and labor sector dependence on demographic indicators

The analysis of the nature of the employed respondents’ work found that the majority of respondents (79.6%) have a permanent job or a fixed-term contract of employment (9.5%). Pearson’s chi-squared test ($\chi^2$) calculation shows that the nature of work doesn’t depend on gender, place of residence and marital status. Nature of the work depends on the age (see. Table 1). Mostly the respondents up to 29 m. (9.2%) and older respondents (60-69 m. - 10.4%, 70 and more years -25%) have hourly work. Mostly respondents of 40-49 age (13.7%) and 70 years and more respondents (12.5%) have fixed-term employment contract. Permanent job has 84.3% of 30-39 years
respondents and 82.8 % of the 50-59 years respondents. Other respondents’ employment in ongoing work is less. It can be assumed that it has acquired in connection with the qualifications and career achievements.

Pearson’s chi-squared test ($\chi^2$) calculation shows that respondents’ labor sector does not depend on locality and marital status, but depending on their gender and age (see, Table 1 and Fig. 2). Most men (66.3 %) are employed in the private sector, while the majority of women (51.1 %) are working in the public sector (see, Fig. 2). This suggests that women are less inclined to take risks, because the work in public sector has more social guarantees. Both in the public and in private sectors the small part of the respondents are employed (4.4 % of men and 3.2 % of women). This shows a lack of interaction between these sectors, respondents adapt to the requirements of a single sector. In the private sector the majority (73.6 %) of young respondents (up to 29 m.) is employed. The older the respondents, the lower part of the respondents are employed in the private sector, and the greater parts are working in the public sector. From 50 to 59 years part of respondents who work in the public and private sector is almost the same. Both in the public and in private sector at the same time mainly 60-69 years respondents are working (6.3 %).

4.3. Analysis of dependence of opportunities to practice the profession on demographic indicators

At present, an unusual situation is on the country's labor market: even with high unemployment rate some vacancies are hard to fill because of a lack of skilled labor. Due to high unemployment and the lack of qualifications in line with market needs it caused the long-term threat of structural unemployment and labor market imbalances. Analyzing the possibility of pursuing a profession (had to re-skilled, work is partly consistent with the specialty, work in their profession, and not according to their specialty, work in their profession), we see that the largest part (36.4 %) of the respondents had to retrain. 31 % of the respondents work according the specialty. Pearson $\chi^2$ criterion calculation shows that the ability to practice the profession depends only on sex (see Table 1, Fig. 3), is independent of age, place of residence and marital status.
Most of women (40.3 %) had to retrain and according specialty only 33 % of women work. The aprt of men who had to retrain consists of 31.9 %, while those who work in their profession - 28.6 %. This shows that women are less likely to find a suitable job. It can be argued that employment’s indicators mainly depend on the age. On residential areas and marital status only employment rate (working, working full-time, working less than one full-time place, working in more than one full-time place) depends. Job type depends only on age, but as an opportunity to practice the profession depends only on sex.

4.4. Analysis of employment factors interrelation

Pearson’s chi-squared test calculation was used to determine the interdependence of employment factors (see table 2). It may be noted that the labor sector (public, private, and public and private), has no relation to employment rate (unemployed, employed full-time, working less than one full-time place, working in more than one full-time place), nor with the nature of work (permanent job, fixed-term contract, hourly, seasonal work, other paid employment) than nor with the opportunity to work according the profession (had to re-skill, work is partly consistent with the specialty; work according their profession, and not according to their specialty; work according to their specialty). Employment rate have a relationship with the nature of work and the opportunity to work according the profession. It can be argued that in order to have a work, the respondents have or retrain, or choose not a permanent job. Otherwise they can become unemployed. In order to get a job (working less than one full-time place or full-time), a large proportion of respondents retrained. But respondents, who work on more than one full-time place, are working mostly according their profession. Also, the nature of work has a connection with the opportunity to work according the profession. In this case, it can be said, that labor market requires a large flexibility. It can be noted that on permanent work the same proportion of respondents who work according to their specialty and who had to retrain are. Fixed-term contracts and seasonal work mostly have respondents, who had to retrain.
### Table 2. Interdependence of employment factors

<table>
<thead>
<tr>
<th>Employment rate</th>
<th>Nature of work</th>
<th>Labor sector</th>
<th>Opportunity to work according the profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rate (unemployed, full-time employed, employees working less than one full-time place, employees working in more than one full-time place)</td>
<td>dependent p-level = 0.000</td>
<td>independent</td>
<td>dependent</td>
</tr>
<tr>
<td>Nature of work (permanent work, fixed-term contract, hourly, seasonal work, other paid employment)</td>
<td>dependent p-level = 0.000</td>
<td>independent</td>
<td>dependent</td>
</tr>
<tr>
<td>Labor sector (public, private, and public and private)</td>
<td>independent</td>
<td>independent</td>
<td>independent</td>
</tr>
<tr>
<td>Opportunity to work according the profession (had to re-skill, work is partly consistent with the specialty; work according their profession, and not according to their specialty; work according to their specialty)</td>
<td>dependent p-level = 0.000</td>
<td>dependent p-level = 0.000</td>
<td>independent</td>
</tr>
</tbody>
</table>

Source: Own calculations based on own results

### 4.5. Analysis of job satisfaction

Respondents were asked: “What is your opinion about the job (if you are currently working)?” and there were presented for evaluation the work quality factors. Respondents were asked to assess the importance of these factors and satisfaction with these factors. Spearman's correlation coefficient ($r_s$) calculation showed a very weak relationship between the importance of factors and the assessment of satisfaction of these factors (see. Table 3). The average relationship exists only between the importance of factors and satisfaction assessment of these factors: the ability to do the favorite work ($r_s = 0.326$), relationship with the manager ($r_s = 0.379$), relationship with colleagues ($r_s = 0.414$) and the possibility to use creatively their abilities ($r_s = 0.398$). We see that these are the factors that strongly depend on employees themselves.

### Table 3. Relation between labor factors’ importance and satisfaction of these factors

| Are these aspects important for you? / Are you satisfied with the following aspects? |
|-----------------------------------------------|----------------|
| Opportunities to work favorite job | $r_s = 0.326$; p-level = 0.000 |
| Possibility to save your job | $r_s = 0.274$; p-level = 0.000 |
| Salary | independent |
| Relationship with the manager, leadership | $r_s = 0.379$; p-level = 0.000 |
| Relations with co-workers | $r_s = 0.414$; p-level = 0.000 |
| Healthy working conditions, stress avoidance | $r_s = 0.172$; p-level = 0.000 |
| Opportunities to harmonize the work, leisure, family obligations | $r_s = 0.207$; p-level = 0.000 |
| Opportunities to use their creative abilities | $r_s = 0.398$; p-level = 0.000 |
| Opportunities for career progression | $r_s = 0.273$; p-level = 0.000 |
| Opportunities for improvement, training | $r_s = 0.295$; p-level = 0.000 |
| Possibilities after work to have a leisure-time | $r_s = 0.285$; p-level = 0.000 |
| Work in general | $r_s = 0.294$; p-level = 0.000 |

Source: Own calculations based on own results
Respondents rated the importance of labor factors and satisfaction of those factors by 5-point system, where 1 - the worst evaluation, 5 - the best evaluation. Average evaluation rating of these factors was calculated (see Table 4 and Fig. 4).

Table 4. Labor factors’ importance and satisfaction of these factors

<table>
<thead>
<tr>
<th>The average rating of evaluation (Importance)</th>
<th>The average rating of evaluation (Satisfaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>4.64</td>
</tr>
<tr>
<td>Work in general</td>
<td>4.64</td>
</tr>
<tr>
<td>Possibilities after work to have a leisure-time</td>
<td>4.6</td>
</tr>
<tr>
<td>Relations with co-workers</td>
<td>4.56</td>
</tr>
<tr>
<td>Opportunities to work favorite job</td>
<td>4.56</td>
</tr>
<tr>
<td>Opportunities to harmonize the work, leisure, family obligations</td>
<td>4.55</td>
</tr>
<tr>
<td>Possibility to save your job</td>
<td>4.51</td>
</tr>
<tr>
<td>Relationship with the manager, leadership</td>
<td>4.5</td>
</tr>
<tr>
<td>Healthy working conditions, stress avoidance</td>
<td>4.5</td>
</tr>
<tr>
<td>Opportunities for improvement, training</td>
<td>4.26</td>
</tr>
<tr>
<td>Opportunities to use their creative abilities</td>
<td>4.22</td>
</tr>
<tr>
<td>Opportunities for career progression</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: Own calculations based on own results

Averages of factors significance evaluation of respondents show that the most important is the salary and work in general (4.64 points). But evaluation of satisfaction of salary is the lowest of all (3.42 points). The least important is the ability to progress in their careers, but and satisfaction of this factor is lowest. The importance of relations with co-workers is evaluated equally as importance of opportunities to work the favorite job (4.56 points). However, if their satisfaction of relations with colleagues considered quite high (4.16 points), the satisfaction of opportunity to work favorite work is evaluated only by 3.92 points. Evaluation of possibilities after work to have a leisure-time (4.6 points) is higher than the possibility to work the favorite job. Apparently, choosing the work, respondents try to do this, because the satisfaction of opportunities to have free time after work is higher. Importance of the ability to save their work place (4.51 points) is less than the importance of opportunities to combine working, leisure-time, family commitments (4.55 points). This shows the priority of family relationships before employment. But satisfaction with opportunities to combine work, leisure, family commitments is much lower (3.9 points). Although the evaluation of importance of potential for improvement, training (4.26 points) and opportunities for creative use of their skills (4.22 points) is low, but evaluation of satisfaction of these factors are still lower (respectively 3.54 and 3.68 points). The importance of relations with co-workers (4.56 points) is evaluated more than the importance of the relationship with the manager (4.5 points), but the satisfaction of this is much smaller (3.96 points). In summary, it can be said that importance of the most of the factors is estimated as 4.5 points, but the satisfaction of those factors is most valued less than 4 points.
4.6. Analysis of employment’s relationship with other factors of quality of life

Questionnaires block “Consumption” presented the question: “How much are you satisfied with your opportunities of consumption and buying?” Pearson’s chi-squared test ($\chi^2$) helped to analyze satisfaction of connection of consumer and purchasing opportunities with employment. Satisfaction with purchase and consumption opportunities depends on the employment rate ($p$-level = 0.000) (see Fig. 5). It can be observed that there are only some who are very satisfied with their consumption and purchasing opportunities. The majority of respondents expressed the average satisfaction. The largest part of the residual is between unemployed, although quite a big number of unemployed respondents are moderately satisfied with their purchase and consumption opportunities. This shows that the personal employment does not always mean a real living rate. On labor sector the satisfaction with consumer and purchase opportunities doesn’t depend.
Questionnaires block “Life’s happiness” presented the question “Express your consent or not with the statements: “I am a happy person”, “I have clear goals in life”. Pearson’s chi-squared test ($\chi^2$) helped to analyze the connection of happiness evaluation with the employment level. Statement “I am a happy person” assessment has a connection with the employment level ($p$-level = 0.000) (see. Fig. 6).

Assessment of statement “You have clear goals in life” is linked to employment rate (unemployed, full-time employed, employees working less than one full-time place, employees working in more than one full-time place) ($p$-level = 0.000). Opportunity to work according the profession (had to re-skill, work is partly consistent with the
Results of the study show that the majority of respondents have clear life goals. However, it can be observed that life goals can be understood in different ways. For example, there are among respondents who have goals in life, almost an equal number of unemployed persons and working as on one full-time place respondents. Among those who have goals the similar number is of those who are working in their profession, and those who had to retrain. Questionnaires block “Life’s happiness” presented the question “Please rate how optimistic you are looking at yours future”.

By Pearson’s chi-squared test ($\chi^2$) there was established the connection of pessimistic / optimistic approach to the future with the opportunity to work according the profession (had to re-skill, work is partly consistent with the specialty; work according their profession, and not according to their specialty; work according to their specialty) ($p$-level = 0.000) (see. Fig. 7). How pessimisticly or optimistically person evaluate his future depend on employment rate (unemployed, full-time employed, employees working less than one full-time place, employees working in more than one full-time place) ($p$-level = 0.000). How pessimisticly or optimistically person evaluate his future doesn’t depend on the labor sector (public, private, and public and private).

Results of accomplished analysis show that employment factors have a relationship with indicators of quality of life and affect the sustainable development process.

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**Fig. 7. Dependence of pessimistic / optimistic approach to the future on employment and opportunities to practice the profession**

*Source: Own results*
Conclusions

Implementation of Sustainable Development Strategy’s objectives and targets are going through other economic development programs. In Lithuanian National Sustainable Development Strategy the sustainable development is associated with moderate and coordinated development of regional economies; with the harmonization of regional differences in living standards; with unemployment, poverty and social exclusion.

To create the necessary productive employment opportunities and to ensure continued livelihoods are one of the most important and difficult tasks of each society. EU social policy is focused on the development of the European social model. The European Employment Strategy provides guidance to achieve full employment, work quality and productivity and social cohesion.

State's prosperity depends on its economic and labor market policy, the ability to guarantee the incomes of population. Employment is a key measure for full, active and equal participation in public life. The more people are involved in full-time or part-time labor market participation, the greater their contribution to the availability of adequate social security protection. However, the poor quality of employment can not properly stimulate the desire to work. The quality of employment is as well as an important indicator as and the employment level. Quality of employment is a broad concept because the quality of employment depends on the characteristics of the workplace, salary, and on the possibilities of career progression, to realize their expectations, and from subjective psychological things - relationships with colleagues, relations with superiors, satisfaction with their lives.

Mykolas Romeris University research group in 2013 - 2014 years implemented the project “Creation of Lithuanian residents’ quality of life measurement indicators system and evaluation models”. Public Opinion and Market Research Center VILMORUS during 11-23 April’2014 by order of Mykolas Romeris University conduct the study “Population labor, employment and entrepreneurship”. Analysis of the results of the study will provide an opportunity to assess the quality of employment and employment impact of quality of life in Lithuania. Joint analysis of employment data shows that employment rate (or the respondent does not work, works full-time, working less or more than one full-time place) does not depend on sex, however, depends on the age, place of residence, marital status and place of residence. Nature of work (seasonal work, hourly, fixed-term contract, permanent employment, paid employment) depends on the age, does not depend on sex, place of residence and marital status. Labor sector (public, private, and public and private) is independent of the place of residence and marital status, but depending on gender and age. The opportunity to practice the profession (had to re-work, work is partly consistent with the specialty, and work in their profession, and not according to their specialty, the work on their specialty) depends only on the grounds of gender, independent of age, place of residence and marital status. It can be observed and employment factors in touch with each other.

There was carried out the analysis of satisfaction of the factors of job and employment relationship with other quality of life factors. It was found that the evaluation of importance of labor factors is different from the satisfaction of these factors. The employment also has a relationship with a sense of happiness, optimism, and other factors. Analysis of these factors is not exhaustive and carried out as an example of the relationship between the employment and the quality of life. The study also gives an opportunity for further analysis of relationship of employment and quality of employment with quality of life factors.

References


SUSTAINABLE DEVELOPMENT THROUGH ENHANCED SOCIAL RESPONSIBILITY

Tetyana Mostenska\textsuperscript{1}, Yuriy Bilan\textsuperscript{2}

\textsuperscript{1,2}National University of Food Technologies
Volodymyrska str. 68, 01-601, Kyiv, Ukraine

E-mails: \textsuperscript{1,2}yuriy_bilan@yahoo.co.uk

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Abstract. Despite the fact that there are numerous researches that study corporate social responsibility (CSR), relevant perceptions and the CSR’s influence on business performance, very little attention is paid to national specifics, analysis of which would provide more deep understanding of the concept and corresponding interrelations with business performance and, ultimately, with sustainable development processes. In the present research we try to partially overcome mentioned weakness by studying the CSR’s state-of-the-art in Poland and Ukraine and providing better insights into these issues. The article contains brief description of the CSR’s concept, with the following empirical research as for its importance, different aspects of its perception and its influence on business performance, as well as relevant conclusions.

Keywords: sustainable development, corporate social responsibility, social behavior, CSR’s national specifics, business performance

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JEL Classifications: M14, O16

1. Introduction

Sustainable development processes are affected by numerous intertwined and one another affecting factors (Plachciak 2009, 2010; Grybaite 2011; Vasiliiuaitė 2014; Tvaronavičienė, Grybaite 2012; Garškaitė-Milvydienė 2014; De Alencar, Almeida 2013; Baikovs, Zariņš 2013; Tvaronavičienė 2014). Values and corporate social responsibility play important role in entrepreneurship phenomenon (Scaringelli 2014; Giriūnas, Mackevičius 2014; Laužikas, Mokšeckienė 2013; Tarabkova 2014; Išoratė et al. 2014; Raudeliūniene et al. 2014). Corporate social responsibility (CSR) is not a new phenomenon; however, in the last decade its significance was constantly growing since there is an increasing number of companies that experienced negative impact caused by their ignoring of social responsibility. Such negative impacts are mostly represented by loss of goodwill, negative public opinions, boycott of customers, in the worst case scenarios they can included employees’ strikes, threats from activists, etc. As evidence suggests, CSR gains more influence both on macro and micro levels.
There are numerous definitions of CSR:

1. European Commission defines CSR as “the responsibility of enterprises for their impacts on society”. Its position on the necessity to introduce CSR principles in the companies’ activity is reflected by the following paragraph: “enterprises should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders”.

2. Business for Social Responsibility (BSR) has the following definition “achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment.”

3. CSR is described as “actions that appear to further some social good, beyond the interest of the firm and that which is required by law” by McWilliams and Siegel (2001).

4. According to Rainey (2008) it is hard to define CSR, since social considerations go beyond any regulatory requirements and include issues dealing with health, safety, natural environment, ethics, etc.

5. Hoskins (2005) states that social responsibility has to improve living standards with simultaneous preservation of the company’s business performance.

As we can see, there no universally accepted definition of corporate social responsibility, it is understood that CSR is a set of policies, practices and programs integrated into business operations, but each country, company has its unique understanding of CSR and the way how it implements corporate social responsibility (Bilan 2013). Such differences are caused by various factors, including, but not limited to: size of the country/company, industrial issues, cultural issues, demands of companies’ owners and society, etc.

Influence of CSR on business performance is also not a clear issue. After reviewing available researches on the issue we have understood that there are three general concepts:

- CSR and business performance are connected. According to Sims (2003), Kotler and Lee (2005) and Horn af Rantzien (2003) there is a positive connection between CSR and business performance, and in the long run it leads to increase of profitability.

- CSR and business performance are not connected. Ullmann (1985) does not see clear connection between business performance and CSR.

- There is no clear understanding on how CSR and business performance are connected (chicken and egg problem). Thus, on the one hand McGuire et al. (1988) found that business performance of the company is a prerequisite to CSR, on the other hand Waddock and Graves (1997) state that CSR results in increasing business performance.

Additionally it should be noted, that recently implementation of CSR was of voluntary nature and it was a question of relevant decision-makers. At the present moment, considering the pressure of world-wide society, some of the countries start the campaign on obligatory implementation of CSR principles. For instance, the CSR strategy of the European Commission (2011) contains provisions not just on promotion of CSR and development of national CSR strategies, it also advises to develop some national regulations in the field. At the same time business mostly understands importance of CSR, but is not over-enthusiastic in respect to obligatory CSR requirements. Moreover, the fact that even scientists have no single point of view on CSR, its perceptions, connection between CSR and business performance, as well as different level of development and implementation of CSR in various countries, makes our research more interesting, since we will provide additional insights into the concept of CSR by studying its national specifics. Therefore, we aim to research in what way CSR is related to a company’s performance, and we intend to study this by answering the following questions:

1. What is the level of CSR importance in Poland and Ukraine?
2. How CSR is perceived in the mentioned countries?
3. Whether CSR influences company business performance and what is the level of such influence?

2. Methodology and Sample

In order to answer the questions above a research study was conducted during the period from 2011 to 2013. For primary data collection we developed and used a questionnaire divided into three parts. First part included
questions covering corporate social responsibility of the company. Second part was dedicated to collection of the business performance data. The third part was used for gathering basic parameters of the company itself (i.e. key business operations, size of the company, number of employees, date of the company’s incorporation, etc.).

1st and 2nd parts of the questionnaire were developed in the form of statements in compliance with the generally accepted guidelines; additionally we have incorporated some statements from “Guidelines Manual for Retailers towards Sustainable Consumption & Production (UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production 2008)” and Ruekert et al. (1985), Krohmer et al. (2002), and Quazi (2003) Gallardo-Vazquez and Sanchez-Hernandez (2012), Horobet and Belascu (2012), Wolska (2013). 3rd part of the questionnaire included simple questions regarding the company itself, no specific methodology was applied here. Since we planned to collect primary data for forming an overall picture and all our statements are related to each other, we have decided to use the Likert scale for measurement of the respondent’s level of commitment to our statements. In order to avoid any data confusing and to ensure its comparability we have applied a unified 5 point scale (1= Strongly Disagree, 2= Disagree, 3=Undecided, 4=Agree and 5= Strongly Agree). Our sample includes 300 companies with different positions at the market from Poland and Ukraine. There are 150 companies from each of the country, i.e. we have a proportional number of companies involved in the research from each of the countries. Brief parameters of the companies in our sample are presented below on the Figures Nos. 1, 2 and 3.

Naturally, the total number of distributed questionnaires was higher than 300, we were distributing our questionnaires until we have not collected enough responses. Mainly we e-mailed our questionnaires and used regular post with prior phone calls to respondents for reaching the highest possible response rate.
For data analysis we have used the following instruments:

1. Statistical Package for the Social Sciences;
2. Reliability tests with Cronbach’s Alpha coefficient. All calculated values were higher than 0.7, the standard which was recommended by Nunnally (1978);
3. Calculation of Spearman’s correlation coefficient was used to assess the level of significance of the findings and influence of CSR on the business performance of the companies;
4. Kruskal–Wallis one-way analysis of variance (ANOVA) in order to reveal the differences between the data collected in Poland and Ukraine;
5. Mann-Whitney U tests were used for determination of groups which are statistically different one from each other;
6. P values were calculated for determination of statistical relationship between variables (conventional significance level of 0.05 was applied).

Main results of analysis are presented below, for more detailed information please refer to Annex A.

3. Level of CSR importance in Poland and Ukraine

Data summarizing perceptions of CSR importance in Poland and Ukraine is presented in the Table 1. Having analyzed the data contained in it we may state that respondents representing the companies believe that their companies understand the role and importance of corporate social responsibility.

If we shall ignore statements Nos. 2, 5, 6, 7 and 18 having the lowest average meaning, the rest of all other statements have the value exceeding 3.00. However, we shall consider influence of relevant meanings of the mentioned statements in the analysis below the table. Additionally, it should be noted that average meanings for over than 50% of statements presented below and directly connected with social responsibility are exceeding 3.50.

Proceeding from the table above, we may state that companies in Poland and Ukraine implement corporate social responsibility principles and have relevant ethics policies allowing them to behave responsibly in relation to community and society (please note the high grade of the statement No. 1). As we can see in the table, the highest grades were also assigned by the respondents to statements Nos. 3 and 4, evidencing the high commitment of the companies in all the countries under consideration to CSR, since both of them ensure companies’ internal and external safety. From another point of view, mentioned statements also deal with the rights of employees and their working conditions, and their high grades also means that examined companies make efforts as for ensuring safety of employees.
Table 1. Data on CSR importance in Poland and Ukraine

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Poland</th>
<th>Mean</th>
<th>St. dev.</th>
<th>Ukraine</th>
<th>Mean</th>
<th>St. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Our neighbors believe that noise levels are ok</td>
<td>4.39</td>
<td>1.213</td>
<td></td>
<td>4.03</td>
<td>1.603</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>There is a problem of waste odors</td>
<td>2.07</td>
<td>1.584</td>
<td></td>
<td>1.38</td>
<td>0.975</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>We have enough fire extinguishers</td>
<td>4.68</td>
<td>0.892</td>
<td></td>
<td>4.69</td>
<td>0.936</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Emergency procedures shall ensure safety</td>
<td>4.48</td>
<td>1.073</td>
<td></td>
<td>4.14</td>
<td>1.297</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Water consumption is low/we produce enough water independently</td>
<td>3.06</td>
<td>1.629</td>
<td></td>
<td>2.33</td>
<td>1.628</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Staff is exposed to temperature or noise extremes</td>
<td>2.62</td>
<td>1.557</td>
<td></td>
<td>2.04</td>
<td>1.445</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Air quality in the offices is poor/there is a lot of dust/vapors</td>
<td>2.43</td>
<td>1.473</td>
<td></td>
<td>2.04</td>
<td>1.482</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Our sick/maternity leave policies are sufficient</td>
<td>3.61</td>
<td>1.454</td>
<td></td>
<td>4.34</td>
<td>1.078</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Employees are satisfied with existing sick/maternity leave policies</td>
<td>3.59</td>
<td>1.372</td>
<td></td>
<td>3.89</td>
<td>1.322</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>There is regular training of staff</td>
<td>3.86</td>
<td>1.308</td>
<td></td>
<td>3.56</td>
<td>1.344</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Staff behaves in way which is environmentally responsible</td>
<td>3.36</td>
<td>1.450</td>
<td></td>
<td>2.65</td>
<td>1.697</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Benefit programs foresee bonuses for good performance</td>
<td>3.99</td>
<td>1.264</td>
<td></td>
<td>4.03</td>
<td>1.261</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>System of internal communication is designed well</td>
<td>4.19</td>
<td>1.163</td>
<td></td>
<td>3.86</td>
<td>1.483</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Safety systems is duly certified</td>
<td>3.54</td>
<td>1.733</td>
<td></td>
<td>2.81</td>
<td>1.809</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Internal meetings are regularly held</td>
<td>3.57</td>
<td>1.371</td>
<td></td>
<td>3.57</td>
<td>1.499</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Salaries of employees are adequate</td>
<td>3.43</td>
<td>1.310</td>
<td></td>
<td>3.58</td>
<td>1.428</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>There is enough freedom of staff and rights to complaint</td>
<td>3.22</td>
<td>1.566</td>
<td></td>
<td>3.12</td>
<td>1.524</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Internal newspapers are a reliable source of up-to-date information</td>
<td>2.73</td>
<td>1.941</td>
<td></td>
<td>2.57</td>
<td>1.471</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Our health security system prevents employees’ sickness</td>
<td>4.51</td>
<td>1.175</td>
<td></td>
<td>2.49</td>
<td>1.537</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>We regularly sponsor humanitarian campaigns</td>
<td>3.73</td>
<td>1.396</td>
<td></td>
<td>2.46</td>
<td>1.598</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Relationships with local communities are on acceptable level</td>
<td>3.51</td>
<td>1.401</td>
<td></td>
<td>3.04</td>
<td>1.353</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Sports, cultural, educational and environmental projects are supported by us</td>
<td>3.66</td>
<td>1.376</td>
<td></td>
<td>2.13</td>
<td>1.417</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed by the author using the primary data of the research

Additionally, we would like to draw readers’ attention to the fact, that respondents graded statements Nos. 5 and 11 with the following average grades: 2.69 and 3.00. For Poland and Ukraine it means that companies have made a significant step forward in their involvement in environmental protection, along with improvement of working conditions. Moreover, considering results that we have received on statements Nos. 12 and 13, we may conclude that importance of developing of knowledge and skills of employees, as the most valuable assets of the company, are not a mere words for companies operating in the Polish and Ukrainian markets. Such companies have an understanding that in the context of CSR activities, their employees must continuously develop their skills through receiving appropriate education and training (Rainey 2008: 232), and this is a good sign from our point of view. Satisfaction with analyzed statements on CSR, as well as ethical policies of Polish and Ukrainian companies, is also confirmed by the average grades of satisfaction with statements Nos. 8, 16 and 19 (all of them have meanings above 3.50).

Based on the results presented in the table above in respect to the statements Nos. 20, 21 and 22, we may state that the companies in Poland and Ukraine understand the importance of CSR and their influence on the communities. However, it should be noted that there is correlation between the level of the company’s involvement in CSR activities and their size. Level of such involvement increases with the relevant increase of the company’s size, large companies have more funding possibilities and can easier benefit from promotional activities connected with their CSR policies.
4. Perception of CSR in Poland and Ukraine

The next part of our research is devoted to the research of difference between perception of CSR in Poland and Ukraine. Using the data below we will try to find out if there are differences among examined countries and which of them is more socially responsible. For obtaining mentioned data in this part of analysis we have applied ANOVA and Mann-Whitney U tests for determination of the pairs of groups with significant differences between each other. In the Table 2 you will find differences revealed by the Kruskal-Wallis Test in respect to the difference in perception of CSR in Poland and Ukraine. Therefore, we may state that CSR is perceived differently in Polish and Ukrainian markets.

**Table 2. Test Statistics on perceptions of CSR in Poland and Ukraine**

<table>
<thead>
<tr>
<th>Q1-12</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>Q11</th>
<th>Q12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>15.4</td>
<td>21.8</td>
<td>20.0</td>
<td>11.0</td>
<td>6.75</td>
<td>7.39</td>
<td>10.0</td>
<td>12.7</td>
<td>5.77</td>
<td>3.16</td>
<td>7.39</td>
<td>5.38</td>
</tr>
<tr>
<td>df</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Asymp.sig.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*Source: Developed by the author using the primary data of the research*

Statements in the table above were the following:
- Q1 - Emergency procedures shall ensure safety;
- Q2 - Water consumption is low/we produce enough water independently;
- Q3 - Air quality in the offices is poor/there is a lot of dust/vapors;
- Q4 - Our sick/maternity leave policies are sufficient;
- Q5 - There is regular training of staff;
- Q6 - Staff behaves in way which is environmentally responsible;
- Q7 - Benefit programs foresee bonuses for good performance;
- Q8 - System of internal communication is designed well;
- Q9 - Safety system is duly certified;
- Q10 - Our health security system prevents employees’ sickness;
- Q11 - We regularly sponsor humanitarian campaigns;
- Q12 - Sports, cultural, educational and environmental projects are supported by us.

In the text below we will provide more details on the results of the data analysis on statements with the most significant differences, as well as results of the tests of Mann-Whitney U.

**Statement: Emergency procedures shall ensure safety.** It was revealed that in case of this statement there is a statistical difference for Polish companies.

**Statements: Water consumption is low/we produce enough water independently; Air quality in the offices is poor/there is a lot of dust/vapors.** As we can see, companies from Ukraine are not involved activities directed to decrease of water consumption and/or using independent water supply. Upon results of the tests, there is an insignificant statistical difference between companies from Poland and Ukraine. Herewith, Ukrainian and Polish companies have similar approach in respect to the air quality in the offices. Thus, air in Ukrainian offices is almost the same as in Polish once. In cases of those countries, size effects of mentioned differences are pretty moderate.

**Statements: Our sick/maternity leave policies are sufficient; Benefit programs foresee bonuses for good performance.** Based on the results of the data analysis we may concluded that companies from Ukraine make more efforts and pay more attention to their HR policies than companies from Poland. Mentioned conclusion is supported by the following indexes: there is statistical difference of p=0.000 between companies from Ukraine
(Md=5.0) and Poland (Md=4.0) regarding the statement on sick/maternity leave policies and the statement on
benefit programs (Ukraine: Md=5.0, n=79; Poland: Md=3.0, n=85). It should be also noted that the difference
between the countries regarding mentioned is not significant, since the tests of Mann-Whitney showed that
associated probability is 0.000 and strength of association is r=0.21 and r=0.27 respectively.

Statement: Our health security system prevents employees’ sickness. In case of this statement we have the
following results: p=0.000, r=0.48 for Polish companies (Md=5.0) and Ukrainian companies (Md=2.0). Results
are pretty confusing, especially compared to the results regarding previous statement connected with
sick/maternity leave policies. Consequently, we may state that companies from Ukraine respect employees’
necessity to be off-duty with simultaneous ignoring health security systems for preventing their sickness.

Statements: There is regular training of staff; Staff behaves in way which is environmentally responsible. It should
be noted that in case of the mentioned statements there is a significant statistical difference for all three countries,
in case of statement regarding training of staff and in case of statement regarding environmentally responsible
behavior. There is no difference regarding first statement for Polish (Md=4.0) and Ukrainian companies (Md=4.0)
and there is weak influence of size effects (r=0.21; U=2421.500, z= -4.311). Thus, Polish companies in most of the
cases have relevant staff training programs, but in case of Ukrainian companies it is not so likely. In case of the
second statement we may see differences between companies from Poland (Md=3.0; U=2334.500; z= -2.925) and
Ukraine (Md=2.0; U=2334.500; z= -2.925).

Statement: System of internal communication is designed well. Proceeding from the results of the data analysis we
have obtained the following indexes: statistical difference is p=0.000, U=2160.500, z= -4.332, r=0.27. Companies
from both countries understand the value of well-designed system of internal communication. Based on the results
of the data analysis, we may see that Polish companies believe that their systems of internal communication are
well-designed, while Ukrainian companies are not so sure.

Statement: Safety system is duly certified. According to the results received in respect of this statement, we may
conclude that companies from both countries pay a little attention to certification of safety systems, ignoring the
fact that nowadays such certification is a must have. There is a statistical difference of p=0.003 when comparing
companies from Poland and Ukraine. However, Polish companies believe (Md=5.0) that their systems are duly
certified, Ukrainian companies doubt that they have necessary certificates (Md=3.0). Please also note that, tests of
Mann Whitney U revealed that size effects are weak (U=2391.000; z= -2.957).

Statements: We regularly sponsor humanitarian campaigns; Sports, cultural, educational and environmental
projects are supported by us. For these statements we have found that there is a difference in case of Ukraine and
Poland and received the following figures: U=1982.000, z= -4.290, p=0.000 for Polish companies (Md=4.0, n=81)
and Ukrainian ones (Md=2.0, n=79). Size effects are medium.

5. Influence of CSR on business performance of the companies in Poland and Ukraine

As it was mentioned earlier, there are numerous researches regarding the interrelation between CSR activities and
business performance. However, there is no single point of view on the issue, results of the mentioned researches
differ from availability of positive correlation between CSR and business performance to its full absence.

For assessing the level of influence of CSR on business performance of the companies in Poland and Ukraine we
have calculated Spearman’s correlation coefficient. It should be noted that we have no studied interrelation of CSR
activities with business performance of the company; we have focused on assessing perceptual measures, including
effectiveness and adaptation levels (Krohmer et al. 2002). In the Table 3 you will find information on the strongest
interrelations between CSR and business performance of the companies in Poland and Ukraine.

Proceeding from the data contained in the table above, we may conclude that there is a low level interrelation
between CSR activities and business performance of the companies. There are several statements having negative
value of the Spearman’s correlation coefficient and we believe that the problem is in the wording of the statements and their understanding by the respondents. In the text below we will provide more details on the results of the data analysis on each element of business performance.

Table 3. Data on strongest interrelations between CSR and business performance in Poland and Ukraine

<table>
<thead>
<tr>
<th>CRT. NO.</th>
<th>Ukraine</th>
<th>Poland</th>
<th>Element of business performance</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>-0.048</td>
<td>0.115</td>
<td>Efficient adaptation to market changes</td>
<td>There is regular training of staff</td>
</tr>
<tr>
<td>2.</td>
<td>0.105</td>
<td>0.198</td>
<td></td>
<td>Staff behaves in way which is environmentally responsible</td>
</tr>
<tr>
<td>3.</td>
<td>0.184</td>
<td>0.224*</td>
<td></td>
<td>Benefit programs foresee bonuses for good performance</td>
</tr>
<tr>
<td>4.</td>
<td>0.158</td>
<td>0.209</td>
<td></td>
<td>Safety system is duly certified</td>
</tr>
<tr>
<td>5.</td>
<td>0.209</td>
<td>0.226*</td>
<td>Increase in adding value to the customers</td>
<td>There is regular training of staff</td>
</tr>
<tr>
<td>6.</td>
<td>0.096</td>
<td>0.112</td>
<td></td>
<td>Salaries of employees are adequate</td>
</tr>
<tr>
<td>7.</td>
<td>0.154</td>
<td>0.278*</td>
<td></td>
<td>We regularly sponsor humanitarian campaigns</td>
</tr>
<tr>
<td>8.</td>
<td>0.002</td>
<td>0.302*</td>
<td></td>
<td>Relationships with local communities are on acceptable level</td>
</tr>
<tr>
<td>9.</td>
<td>0.407*</td>
<td>0.239*</td>
<td></td>
<td>The development of sports, culture, education, and environmental projects</td>
</tr>
<tr>
<td>10.</td>
<td>0.369*</td>
<td>0.284*</td>
<td>Higher involvement in the local market</td>
<td>We regularly sponsor humanitarian campaigns</td>
</tr>
<tr>
<td>11.</td>
<td>0.586*</td>
<td>0.427*</td>
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<td>Relationships with local communities are on acceptable level</td>
</tr>
<tr>
<td>12.</td>
<td>0.025</td>
<td>0.201</td>
<td>Satisfaction of basic rights of the consumers</td>
<td>Sports, cultural, educational and environmental projects are supported by us</td>
</tr>
<tr>
<td>13.</td>
<td>0.07</td>
<td>0.204</td>
<td></td>
<td>There is regular training of staff</td>
</tr>
<tr>
<td>14.</td>
<td>0.209</td>
<td>0.278*</td>
<td></td>
<td>Safety system is duly certified</td>
</tr>
<tr>
<td>15.</td>
<td>0.021</td>
<td>0.260*</td>
<td></td>
<td>Salaries of employees are adequate</td>
</tr>
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<tr>
<td>17.</td>
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<td>We have enough fire extinguishers</td>
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<td>Emergency procedures shall ensure safety</td>
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<td>Our sick/maternity leave policies are sufficient</td>
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<td>0.349*</td>
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<td>0.352*</td>
<td>0.303*</td>
<td></td>
<td>Staff behaves in way which is environmentally responsible</td>
</tr>
<tr>
<td>26.</td>
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<td>0.178</td>
<td></td>
<td>We regularly sponsor humanitarian campaigns</td>
</tr>
<tr>
<td>27.</td>
<td>0.117</td>
<td>0.205</td>
<td></td>
<td>Relationships with local communities are on acceptable level</td>
</tr>
<tr>
<td>28.</td>
<td>0.225*</td>
<td>0.289*</td>
<td></td>
<td>Sports, cultural, educational and environmental projects are supported by us</td>
</tr>
<tr>
<td>29.</td>
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<td>0.356*</td>
<td></td>
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</tr>
<tr>
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<td></td>
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<tr>
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<td>0.240*</td>
<td></td>
<td>Internal meetings are regularly held</td>
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<td>34.</td>
<td>0.214*</td>
<td>0.260*</td>
<td></td>
<td>Salaries of employees are adequate</td>
</tr>
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</table>

Source: Developed by the author using the primary data of the research
Efficient adaptation to market changes. As we can see, companies which conducted regular training of staff are the companies which have no problems in the challenging market environment, since they efficiently adapt to any changes. However, regular training of staff is not the only element having positive influence on the level of the company’s adaptation to market changes. Such elements also include the following: environmentally friendly behavior of staff, certification of safety systems and development of benefit programs. All those elements have moderate positive interrelation with the company’s ability to comply with the changing market requirements, which in its turn results in higher business performance of the company.

Increase in adding value to the customers; higher involvement in the local market. According to the data contained in the table above, activities of the companies connected with training of staff, development of adequate salary policies, as well as their active involvement in the life of local communities through participation in humanitarian campaigns and other social projects are positively interrelated with the increase in the value offered to customers and the level of companies’ involvement in the local market.

Satisfaction of basic rights of the consumers. Data in the Table 3 confirms positive interrelation between policies of the companies regarding staff training, adequate salaries and satisfaction of basic rights of consumers through reaching of higher level of customer service due to involvement of more experienced and trained employees in such service. Moreover, on the basis of the correlation analysis we see that availability of certified safety system at the company results in higher satisfaction of consumers compared to competitors which do not have such duly certified systems. Additionally, there is a positive correlation between the increase of the company’s level of relationships with local communities, its responsibility before consumers and care about basic rights of the consumers.

Company’s responsibility before employees. Companies paying attention to availability of enough fire extinguishers, development of emergency procedures, dealing with staff exposure to temperature and noise extremes, along with implementation of employees friendly sick/maternity leave policies, salary policies, benefit programs, as well as internal communication systems are considered as companies that care about their employees. Thus, additional efforts of the company on the mentioned issues shall result in higher responsibility of the company before employees compared to its competitors.

Company’s responsibility before community. Having analyzed the data on influence of CSR elements on company’s responsibility before community we may state that there is a positive correlation in respect to the following: environmentally friendly behavior of staff, regular sponsorship of humanitarian campaigns, dealing with the needs of local communities on the acceptable level, support of sports, cultural, educational and environmental projects. More active involvement of company in respects mentioned above shall lead to greater responsibility before community and formation of non-market competitive advantages.

Higher involvement of employees in business activities. According to the data presented in the table above, higher involvement of employees in business activities of the company may be reached by enhancing company’s sick/maternity leave policies, salary policies and benefits programs. Additionally, such involvement can be encouraged by regular training of staff, promotion of environmentally responsible behavior of staff and holding internal meetings more often.

Conclusions

Upon results of the research we have reached the following conclusions:

Companies in Poland and Ukraine understand the importance of CSR. The level of their involvement in CSR activities is high. Local companies comply with ethical requirements; they make efforts on improvement of employees’ working conditions. Knowledge and skills of employees are treated by the companies as one of the most valuable asset. Additionally, they understand their influence on local communities and try to comply with the principles of CSR and sustainable development.
Perception of CSR in some respects is quite different in Poland and Ukraine. Ukrainian companies are more involved in enhancing their HR policies. Polish companies are more focused on staff training.

It was revealed that CSR influences business performance of the company, however, level of such influence is low. There is the most significant correlation between business performance of the company and the following CSR elements: regular training of staff, benefit programs with bonuses for good performance, adequate system of salaries and regular participation in social life of the local community. To generalize, corporate social responsibility appear to be rather weak driving force of sustainable development processes.

References


Scaringelli, M.A. 2014. Are the foreign controlled firms more environmentally sustainable than domestically controlled ones?, *Journal of Security and Sustainability Issues* 4(2): 131–146. DOI: [http://dx.doi.org/10.9770/jssi.2014.4.2(3)]


Tvaronavičienė, M. 2014. If industrial sector development is sustainable: Lithuania compared to the EU, *Entrepreneurship and Sustainability Issues* 1(3): 134–142. DOI: [http://dx.doi.org/10.9770/jesi.2014.1.3(2)]


## Annex A

### Additional information on results of data analysis

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<th>Q10</th>
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</tr>
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</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

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

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Q3_3</th>
<th>Q4</th>
<th>Q8</th>
<th>Q12</th>
<th>Q13</th>
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<td></td>
<td>0.100</td>
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<td>0.147</td>
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<td>0.046</td>
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<td>79</td>
<td>79</td>
</tr>
</tbody>
</table>

| Q4 | Correlation Coefficient | 0.181 | 1.000 | -0.292 | 0.248 | 0.219 | 0.153 | 0.004 | 0.080 |
| Sig. (2-tailed) |       | 0.093 | 0.026 | 0.052 | 0.178 | 0.410 | 0.461 |       |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

| Q8 | Correlation Coefficient | -0.226 | -0.292 | 1.000 | -0.362 | 0.031 | -0.250 | 0.191 | -0.382 |
| Sig. (2-tailed) |       | 0.016 | 0.001 | 0.787 | 0.026 | 0.184 | 0.001 |       |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

| Q12 | Correlation Coefficient | 0.282 | 0.240 | -0.362 | 1.000 | 0.270 | 0.274 | 0.351 | 0.124 |
| Sig. (2-tailed) |       | 0.012 | 0.028 | 0.001 | 0.014 | 0.014 | 0.002 | 0.240 |       |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

| Q13 | Correlation Coefficient | 0.147 | 0.219 | 0.031 | 0.276 | 1.000 | 0.489 | 0.050 | 0.157 |
| Sig. (2-tailed) |       | 0.000 | 0.001 | 0.014 | 0.014 | 0.000 | 0.026 | 0.686 | 0.230 |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

| Q14 | Correlation Coefficient | 0.014 | 0.153 | 0.250 | 0.374 | 0.489 | 1.000 | 0.251 | 0.334 |
| Sig. (2-tailed) |       | 0.001 | 0.026 | 0.000 | 0.026 | 0.026 | 0.000 | 0.003 |       |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

| Q15 | Correlation Coefficient | 0.000 | 0.063 | 0.362 | 0.134 | 0.137 | 0.334 | 0.005 | 1.000 |
| Sig. (2-tailed) |       | 0.001 | 0.001 | 0.000 | 0.003 | 0.001 | 0.000 |       |
| N              | 79    | 79  | 79  | 79  | 79  | 79  | 79  | 79  |

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
### Correlations

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<td>.001</td>
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**Correlation is significant at the 0.01 level (2-tailed).**

*Correlation is significant at the 0.05 level (2-tailed).**
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**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).
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**. Correlation is significant at the 0.01 level (2-tailed).
TOWARDS A SUSTAINABLE LATVIAN ENERGY RESOURCES AND ENERGY MARKETS IN THE CONTEXT OF THE EU

Vladimir Jefremov¹, Aleksandrs Rubanovskis²

¹Baltic International Academy, Riga, Latvia
²Baltic Psychology and Management University College, Riga, Latvia

E-mails:¹,² antraru@inbox.lv

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Abstract. The article analyses energy and energy source markets. The mainproducer and supplier of electrical energy and heating is determined; the role of the EU in energy safety and the responsibility in energy source supply of member countries are assessed; which the most important energy sources are while forecasting electricity plant variety and its building. The assessment of electricity production at hydro power plant at Latvenergo plc is given.

Keywords: sustainability, energy security, energy industry, energy policy, energy source market, Latvenergo, safe electricity supply

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JEL Classification: L94, Q20, Q28

1. Introduction

Energy plays a vitally important role in modern society. Due to the planet population increase and life level improvement in the future we will need even more energy. The interest increase to sustainable energy sources in different countries around the world is also closely linked to a constant decrease of fossil energy sources, ecology degradation linked to gas emissions, leading to greenhouse effect (Lankauskiene, Tvaronavičienė 2012; Tvaronavičienė 2012; Lapinskenė et al. 2013; Lapinskenė et al. 2014; Vosyliaus et al. 2013; Mačiulis, Tvaronavičienė 2013; Lankauskiene, Tvaronavičienė 2013; Raudeliūniene et al. 2014; Tvaronavičienė 2014). Additionally, energy business exists in a dynamic environment, constantly changing under the influence of political, ecological, geopolitical, economic and social factors. Many countries would be willing to release energy sources from overwhelming influence of such factors, and the most importantly from a political situation.

The problem of shifting to ecologically friendly sustainable energy sources (SES), particularly biomass, is viewed in many publications both by foreign researchers (Ala-Juusela et al. 2014; Guruz, Scherer 2014; Cuneo et al. 2014; Barberis et al. 2014; Tvaronavičienė 2012; Vosyliaus et al. 2013; Miškinis et al. 2013; Dudzevičiūtė et al. 2014) and those from Latvia, such as Dubrovskis et al. 2010; Slepets et al. 2012). SES help to vary
energy source supply and in the long term perspective can substitute decreasing fossil energy sources. Growing demand on SES in industrially developed countries leads to cost reduction because of production development; this development makes it easier for the developing countries to get access to the projects on SES application (Ala-Juusela et al. 2014; Guruz, Scherer 2014; Cuneo et al. 2014; Barberis et al. 2014; Tvaronavičienė 2012; Vasiliūnaitė 2014, Miškinis et al. 2013).

The aim of the article. To assess the position of Latvia on EU energy market, opportunities and perspective development of energy in the republic. Enabling objectives: assessment of energy industry importance in economics of Latvia and the EU; assessment of policy in energy industry; situational analysis; formation of the main principles of energy supply safety; research of possibilities of sustainable source application. Brief Assessment of Energy Industry. Energy is a basic economics industry with a huge volume of capital investment, production density, a high level of mechanization and automation of production processes. As an industrial branch, energy influences a lot the functioning efficiency of all the other industries both production and service, firstly, because all of us are its consumers including all the production and consumption fields. In a physical sense energy is an agglomerate of cutting edge and high technology equipment, which transforms potential energy which is present in sources into other different types of energy to make that more practical to use.

Energy embraces the whole complex of problems on creation, transformation, processing, distribution and selling of the energy to the consumers. Thus, the most important task is qualitative, long term, safe, with minimal cost and prices energy supply to the consumers, namely economics and population. Energy complex represents a huge industry which includes extraction and processing of energy sources, their transportation, production of electricity and heating energy, their distribution and using by consumers. Energy consumption grew historically together with production and consumption growth, independently from the EU formation. However, together with the EU development dramatic changes appeared, linked to the changes of energy supplier and consumer relations, energy supply market monopolization, introduction of competition elements and, as a result, electricity market democratization. Eventually, all the points mentioned allow creation of a united European electrical energy market. Figure 1 shows the relations among energy production and consumers, suppliers (including residential sector), as well as with external environment.

![Relations of Energy Producers with external environment](source)

**Fig.1. Relations of Energy Producers with external environment**

*Source: Developed by the authors on the basis of publications in the journal Latvijas Gāze plc No.1/2008*

2. Basic Tools of Energy Policy in EU

The main directions of energy policy in the EU member countries are determined by the most important EU directives, as this is one of the priority tasks. For many years more and more investment is directed to the application of sustainable energy sources and energy efficiency increase on their basis. There have been many
directives accepted determining the basic criteria of energy efficiency increase and stating further objectives (the journal “Energy and Automation” No (01)2008). For a long time in the EU there were no uniform criteria on the usage and the choice of energy sources. The responsibility for primary and secondary energy source use lied on the EU member countries, which themselves determined possibilities, structure of primary sources and energy processing cycles. Since 2003 in energy sector of the EU there has been the most attention drawn to the efficiency of natural gas, electricity and sustainable energy source application. However, the emphasis from political and legislative point is shifted to the technical and economic policy tools.

Three most important energy segments – natural gas, electricity and sustainable energy source application found their reflection in the most important EU directives, which mostly have been accepted and enforced by all EU member countries. It is also determined by the domestic legislation of EU countries. Unfortunately, not all the questions of energy supply have been solved in a proper way, which is linked to inner and outer reasons. For example, on natural gas market of Latvia the monopolized position is occupied by the Russian corporation “Gazprom”, which, naturally, determines the conditions of natural gas supply. Such monopolized position of “Gazprom” according to interstate agreements has to be kept to April, 2017. The main reason is that “Gazprom” does not agree to diversify the system of gas supply, as it is directed by the EU documents. Today, there has been the whole range of directives accepted and enforced directed to energy efficiency increase. They are the Directive of the European Parliament and of the Council 2002/91/EK; 2002/55/EK.

An important place in market regulation is taken by the directive of the European Parliament and of the Council 2003/55/EK from 26th, June, 2003, about common conditions of natural gas market regulation, the directive 2003/54/EK about conditions of using electricity in domestic market, the directive about sustainable energy source application from 17th December, 2008 and others. In 2005 “Green Book of Energy Efficiency” was developed, but in 2006 a new political document “New Energy Policy of Europe” and today “Green Book” about competitive, safe and long term energy policy of Europe has been published. On 13th, June, 2009 the directive 2009/72/EK was accepted, determining the main directions of energy development in the EU. According to it a common European Energy Programme for Recovery has been developed. Companies from Latvia also take part in it, thus, for example, within the frames of the programme mentioned, the company NordBalt, is planning to lay a submarine cable between Sweden and Lithuania, which will allow increase the missing capacity of Latvia energy infrastructure (Kurzemes curve).

Additional incentive in energy application efficiency increase was introduction of the tax on the electricity use, which was enforced by the council directive from 29th, April, 2004, 2004/74/EK, as well as amendments to the directive 2003/96/EK about the possibilities for some countries to apply for temporary tax reductions and even tax cancelling. The most important document, directed to a common electricity sector and market development was accepted by the European Parliament and Council directive 2003/96/EK from 27th, December, 2003. However, by developing a common electricity market of EU countries, including the Baltic States, a contradictory situation appears: there is a united summative electricity balance of the Baltic States, which is limited by using partly shared facilities, although, according to the directive mentioned, electricity producers compete freely on the common energy market, which practically is impossible.

3. Electricity Market

Electricity market in Latvia has been opened since 2007, but even until now there are only two electricity suppliers present – state owned enterprise Latvenergo plc and a subsidiary of Estonia state owned enterprise Eesti Energia SIA Enefit Ltd. The leading electricity and heating energy producer in Latvia is Latvenergo plc. More than a half of electricity consumed in the country is produced at Latvenergo plc power plants. The majority of electrical energy Latvenergo plc produces at hydro electrical power plants. About 70% of electricity produced is from sustainable energy sources, friendly to the environment. At Riga electricity power
plant Latvenergo plc produces about 70% of heating energy necessary for Riga and about 20% of electricity necessary for the country. Modern energy production blocks allow provision of basic electrical energy capacity. The other part of electricity, necessary for energy supply of the country, Latvenergo plc imports from Estonia, Lithuania, Russia and, in some cases, from Finland. Different energy sources provide continuous electrical energy supply. Three hydro electrical power plants (Kegums HEPP, Plavinas HEPP and Riga HEPP) Latvenergo plc produces about 70% of all the electricity capacity produced in the country (The Latvia Ministry of Economy). It is necessary to emphasize that Latvenergo plc possesses two big thermo electric power plants – Riga TEPP-1 and Riga TEPP-2, which produce both electricity and heating energy. Within a year the thermo electrical power plants produce about 30% of the whole volume of electricity, produced by Latvenergo plc, and 70% of the heating energy produced for central heating of Riga. To build an effective electricity market by increasing energy safety and to increase the investment volume in electricity system infrastructure, the opening of electricity market in Latvia will have been finished by 1st, January, 2015. Together with the main supplier Latvenergo plc, electricity in Latvia is produced by 140 small electricity plants, 30 wind powered electricity plants and 69 electricity plants of combined production. In its turn, for electricity division and selling the licence was given to 30 entrepreneurs.

On the free electricity market, it can be bought so far only by those companies which turnover is more than 10 million euro or which employ at least 50 employees. According to the law enforced on electricity market, which was accepted on the basis of directive of European Council 2003/54/EC, Latvenergo plc developed the project of reorganization, as a result of which, on 1st, September, 2005 two new legally independent companies: high voltage network control operator - Augstsprieguma tikls plc and distribution system operator - Sadales tikls plc were formed. Small enterprises and households are still at the regulated electricity market, so they are the clients of Latvenergo plc. Access to the market for the other players is hurdled also because the electricity network companies Sadales tikls plc and Augstsprieguma tikls plc are separated from Latvenergo plc only formally, in other words, these companies are still acting as 100% subsidiaries of Latvenergo plc. This situation was partly changed in 2013 by the introduction of The Third Energy Package of EU in Latvia, which states the changing of the owner of High Voltage System. Most probably, the company will remain state owned, but it will be managed by the other state structure. Latvenergo plc as a potential owner is not considered.

4. Sustainable Energy Sources

The part of sustainable energy sources in energy balance in Latvia is 30-35%. Latvia stated the aim to achieve the level of 40% in the field of sustainable energy sources. The most profitable “green” energy way is using wood (mainly in heating 80%) and Daugava HEPP, which belongs to Latvenergo plc (about 16%) (Central Statistical Bureau of Latvia). Application of “new” sustainable energy sources, such as bio gas and wind comprises only 1% of the whole volume of electricity produced. The development of “new” sustainable energy sources is hurdled by a vague legislation and chaotic situation from the government support in this field. From the state point of view and activities in sustainable energy source field, the most perspective types of “green” energy in Latvia, biomass (Biomass Energy Centre (2012); Boundy et al. (2011); Darby (2014); Klass (1998) and biogas (Quaak et al. (2009)) are considered. Possibly, there is going to be a very generous support from the state. Table 1 shows electricity capacity of electricity plants and cogeneration plants, which use sustainable energy sources in dynamics.

<table>
<thead>
<tr>
<th>Table 1. Electricity capacity of power plants and cogeneration plants using sustainable energy resources MW</th>
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<tr>
<td>Total</td>
</tr>
<tr>
<td>Hydro electrical power plants</td>
</tr>
<tr>
<td>Wind power plants</td>
</tr>
<tr>
<td>Electricity plants operating on biomass and cogeneration plants</td>
</tr>
<tr>
<td>Biogas cogeneration plants</td>
</tr>
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</table>

Total sustainable energy source consumption in Latvia in 2013 reached 68 peta-joules according to Central Statistical Bureau of Latvia, compared with the consumption in 2012, it decreased by 2.5%. It is connected with the decrease of electricity production at hydro electrical plants. In 2013 the volume of electricity produced by hydro electrical plants was 2,912 giga watt hours (GWh), which is 21.9% lower than in 2012 (Central Statistical Bureau of Latvia). The structure of electricity production from sustainable energy resources is presented in Figure 2.

Fig. 2. The structure of electricity production from sustainable energy sources

Source: https://www.em.gov.lv/lv/nozares_politika/tautsainniecibas_attistiba/zinojums_par_latvijas_tautsaimniecibas_attistibu/

Currently, the infrastructure is being developed where Latvenergo plc, by means of EU co-financing, is building a new energy network with 330 kilovolt (total length 330 km, capacity – 800 MW), a so called Kurzemes curve: Grobina – Ventspils– Tume – Imanta (Riga) – TEPP 1 (in Riga) (Kurzemes loks). Building of more powerful networks in the region will allow wind power plants to develop both on the land and on the sea. By the mid 2014 the research was undertaken on the building of the LNG (trans boarder gas pipes) in Latvia which would make Latvia less dependable on gas supply from Russia and the state would become the potential centre of gas supply in the region.

In the heating supply to general public the situation is as follows: there are 88 commercial enterprises which deal with heat supply. Central heating is used by 65% of Latvia population, the majority of which are the inhabitants of Riga – 52%. If in rural regions heating is provided by wood mainly, in Riga all the heating energy is produced on the basis of natural gas. There are also heating power stations on the basis of biomass and wood. The central heating price in autumn 2012 proves that the lowest price is in the places where wood or biomass are used, at the same time the highest prices are in the towns where natural gas is used. It also should be emphasized that in Latvia bio gas is produced.

It takes place at big recycling fields – Getlini Eko in the suburbs of Riga and ZAAO (the organization of waste neutralization and recycling) in Vidzeme. The biggest players in the industry are the garbage collectors Veolia, L&T Hoetika, Eko - Rīga, Eko – Kurzeme. In specific garbage collecting and recycling the following companies Lautus, BAO, Latvijas Zalais punkts and Zaļā josta specialize (Latvia Association of Heat). Unfortunately, due to different interest collisions the question of building a modern factory to burn the garbage has not been pushed forward yet. Garbage sorting is not developed to a full extent so far. The biggest companies in the energy industry in Latvia according to a net turnover are presented in Table 2.
Table 2. The biggest companies in the energy industry

<table>
<thead>
<tr>
<th>No</th>
<th>Company</th>
<th>Activities</th>
<th>Net turnover in 2013 million euro</th>
<th>Net turnover in 2012 million euro</th>
<th>Turnover change, from 2012 to 2013, %</th>
<th>Profit in 2013, million euro</th>
<th>Staff in 2013, people</th>
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</thead>
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<tr>
<td>1</td>
<td>Latvenergo, plc</td>
<td>electricity production</td>
<td>867.60</td>
<td>811.54</td>
<td>7%</td>
<td>28.79</td>
<td>1 387</td>
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<tr>
<td>2</td>
<td>Latvijas Gāze, plc</td>
<td>natural gas supply</td>
<td>469.13</td>
<td>499.44</td>
<td>-6%</td>
<td>28.41</td>
<td>1 327</td>
</tr>
<tr>
<td>3</td>
<td>Sadales tīkls, plc</td>
<td>electricity supply</td>
<td>299.57</td>
<td>355.51</td>
<td>-16%</td>
<td>-</td>
<td>2 820</td>
</tr>
<tr>
<td>4</td>
<td>Itera Latvija, Ltd</td>
<td>gas supply</td>
<td>108.25</td>
<td>200.39</td>
<td>-46%</td>
<td>5.65</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>Baltenergotrade, Ltd</td>
<td>electricity supply</td>
<td>28.10</td>
<td>52.19</td>
<td>-46%</td>
<td>1.68</td>
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</table>


**Innovative solutions.** Currently, in Latvia more and more attention is paid to such an innovative solution, as sustainable energy source application. From the sustainable energy sources used in Latvia the most important emphasis is placed on biomass. The notion “biomass” is related to any substances of plant origin, which can be used to get energy, including wood, herbs, plant and wood waste and may others. Biomass energy has significant advantages compared with fossil types of fuels and with other types of sustainable energy sources. Among the basic advantages the following can be mentioned:

- **Easy accessibility even in distant places:** biomass fuel is accessible everywhere where the trees and agricultural plants grow, as well as where food products and fibres are processed;
- **It is the source that can be used when necessary:** biomass is the source of energy that can be stored and can be used at any necessary moment with the aim to produce energy, compared with other sustainable sources which are unstable and/or seasonal;
- **It is universal:** biomass is a potential source of any possible basic energy products – liquid, gas, heat and electricity;
- **There is no influence on the climate:** under the condition of ecologically rational production and burning, biomass energy does not lead to climate change and greenhouse effect;
- **There is an aggregate advantage for rural inhabitants:** aggregate advantage of energy systems on the basis of biomass is kept on the local level and can enhance significantly the development of rural regions by means of creating local source of income. Biomass energy enhances the income through the whole supply chain and while using heating and electricity, which is an important advantage of its use as a tool to fight low level of life.
- **However, the biomass energy** – is one of the most difficult from alternative sustainable energy sources: the organisation of trustworthy, regular and accessible fuel supply in necessary amount and appropriate quality can be a challenging task; the fuel from biomass often requires significant land and work resources, it is very dependable on price stability, as well as the project developers often face big amount of alternative technologies.

According to Latvia association of biomass producers forecast *LATbioNRG*, in 30 years the Baltic States will achieve full energy independence by using their own sustainable sources, and Latvia has more of those than other Baltic countries. Annual Latvia supply of heat energy is within the frames of 8 million MWh, almost 7 million MWh (mainly in the form of natural gas for TEPP, for town central heating production and, as well as, coal and oil) is bought abroad, primarily in Russia. Latvia also annually buys about 3 million MWh of electricity. At the same time small energy of the country, working on the basis of sustainable energy sources, during 10-15 years can substitute a half of thermal energy and 25% of electricity import, achieving the model of energy independence. Added value of Latvia biomass is 10 times higher than that of imported traditional energy sources.
Briquettes and pellets from wood chips are used mainly to heat private small farms, which have boilers with the capacity of 0.1-5 MW. In Sweden which started the introduction of projects using biomass for heating and lightning, there are towns with 300,000 inhabitants and more, which consume the energy produced only from wood. Austria and Germany provide 40% of their energy from biomass. In Lithuania there are more than 200 of such boiler stations with total capacity of 600 MW, which heat villages and big factories. Central heating in the majority of Latvia districts works using gas and oil. On 11th, September, 2013 Fortum Jelgava opened a new cogeneration plant of biofuel in Jelgava. Fortum Jelgava – is a subsidiary of a Finnish company Fortum, which is one of the biggest energy producer in northern Europe. Finnish company Fortum is one of the four biggest energy enterprises in northern Europe. The main competitors of Fortum in the region are such companies as Vattenfall, Statkraft and E.ON. The management of the Finnish company Fortum believe that Latvia is a good place for investment and a good market for the companies. The company Fortum in 2008 bought the heating supply company Jelgavas Koģenerācija and renamed in into Fortum Jelgava. Fortum invested in the project of Jelgava cogeneration plant on biofuel and into its infrastructure 70 million euro. Additional six million was allocated from EU structure funds. It is planned that the plant will provide up to 85% of central heating capacity in Jelgava. When the plant starts operating to its full capacity, the tariff will fall by 10%, but from November, 2013, the inhabitants of Jelgava are going to pay less than in the former heating season. The plant employs 45 people. Together with Europe fund co-financing, as well as investing their own money and loans attracted there are more than 70 companies which produce biogas and biofuel in Latvia. Wind power plants, solar, thermal and hydrothermal energy are developing in Latvia; small hydra power plants are extremely promising as well. Sustainable energy sources take an important place in the energy balance in Latvia. The main sustainable energy sources in Latvia are biomass (wood) and hydro sources, a little less wind power energy, biogas, haulm and other biomass are used. The part of sustainable energy sources in total energy consumption in Latvia in 2012 was 31.7%, in 2013 it grew up to 34.2%. In 2012 in the segment of conversion from the total amount of fuel used 16.3% were sustainable fuel types (wood, haulm, other biomass, biogas, biofuel). In 2012 in Latvia there was a growth in biofuel consumption in transport, which is linked to the directive 2009/28/EK, which was accepted by European Parliament on 23rd, April, 2011 about stimulation of sustainable energy source application. Every member country should provide that the part of sustainable energy sources used in energy production for transport in 2020 must contain at least 10% of final consumption (in 2010 in Latvia there was only 0.9%, in 2011 – 1.4%, in 2012 – 1.9%). Efficiency increase of using energy sources and energy on different production stages, transportation and consumption is one of the most important tasks of Latvia in development and energy policy, as it was stated in the Ministry of Economics report. The structure of electricity consumption consists of the energy produced by hydroelectricity power plants, wind power electricity plants, biogas electricity plants and biomass electricity plants, as well as of energy produced by cogeneration power plants. The biggest share of the gross final energy consumption in Latvia consists of heating and cooling, including central heating, so it is important to move in the direction of energy efficiency increase, as the Ministry reports. The biggest opportunities to learn the local sustainable sources with maximum efficiency are in heating energy.

5. Principles of Electricity Supply Safety

In the basis of electricity supply safety of consumers there is a sum of the volumes of generating electricity capacity in the country and electricity supply from outside market, which should be constant and steady. So, in the long term perspective the safety will depend on the investment into generating capacities, the timely replacing of the worn-out facilities and construction of new, as well as investment into the processing of primary and secondary sources, management systems, distribution and consumption of energy sources. Latvia state energy system historically developed as a deficit energy system. The republic mainly possesses a developed distribution system, there is less attention paid to new capacity construction, since for a long time there was no problem to buy additional volumes of electricity from neighbouring republics. Constant electricity deficit in Latvia has led to a dependence on imported sources and can lead even to the necessity to limit or even switch off an entire range of electricity consumers. Due to this in the electricity sector of industry, with the aim to minimize risks, it is important not only to develop and introduce projects on lost capacity recovery, but also to construct new, more powerful power plants. While analysing the available information from different sources about the plans of energy system development in Latvia and neighbouring countries it could
be concluded that if we do not manage to reconstruct and introduce new power capacities, the Baltic region, starting from 2015 will experience a systematic electricity power deficit. Unfortunately, it should be stated that the construction of small hydro power plants during the last years has not solved the problem, but even made it worse, namely, by price level increase on the electricity produced, due to unfavourable ecological consequences connected with flooding and fishing industry.

There is one more unsolved problem remains about the development of nuclear energy. There is a controversial assessment of the situation with its development, taking into account different criteria, namely, safety of economics, comparative profitability in comparison with other energy sources, price of the energy produced and capital investment on the result acquainted. The closing of Visaginsk nuclear power plant, the only in the Baltic states, is a good example. There are many examples in the world where the density of nuclear energy is comparatively high and grows further (France, Japan and Canada). Even in neighbouring countries (Belorussia) there has been a decision to build a new nuclear power plant. Naturally, when making a decision a negative effect of consequences in case of emergency, for example Chernobil NEPP, should be considered, as well as its technical opportunities and comparative profitability if compared with other types of energy production, economic feasibility.

In national terms it is necessary for Latvia to evaluate the growth of installed power in economy generally, the risk of energy supply imbalance, the possibility of importing electricity, taking into account its price fluctuations and other factors which reduce the level of energy supply security. It is even more important on the edge of the following 2015, when it is possible to face an acute crises in electricity supply, as well as the price growth. The main problem is a significant deterioration of power plant equipment and the possibility of their closing in the period of up to 2025. On the basis of expert assessment, it is necessary for Latvia to urgently accept by 2015 the programme on new power plant construction (journal “Energy and World” No (1) 2008).

6. Energy Source Characteristics

To build new electricity plants there is possible access to different energy resources: solar, wind, hydro, wood and coal (journal “Energy and Automation” No (02)2008)

**Solar energy**
Modern methods and technologies provide the opportunity to use solar energy both for heating and for energy production. Solar energy draws close attention recently because it is relatively cheap to use, it is sustainable, but it can be used effectively where there are a lot of sunny days with effective solar heating where it is difficult for Latvia to compete with southern countries. However, cutting edge technologies allow reducing this negative effect.

**Wind power**
The wind has cycling character. An average speed in Latvia at 10 metre altitude is 5-6 meters a second, which allows using this energy on the coast of the Baltics. However, although it is a serious sustainable energy source, it is not regular and its power is difficult to forecast.

**Hydro power**
Water resources in Latvia are easily accessible, take up to 39% of all country territory. The condition for such energy production and for building a hydro power plant is the length, altitude difference and the volumes of water discharge. Mainly, the appropriate places are the middle and the mouth of the Zapadnaja Dvina (the Daugava), where a cascade of three hydro power electricity plants has been built (Kegums, Plavinas, Riga), which brings a significant share into total energy volume. There are heated discussions about plans to build one more hydro power plant – Daugavpils, because of high investments, ecological problems, social and political disagreements with the neighbouring Belorussia. There are also other problems of building small hydro power plants with the capacity of 5 MW which were mentioned above.

**Wood**
Latvia is rich in wood resources, which increases its application not only in its primary way, but also as a waste in the form of wood pellets, briquettes, chips and others. Woodworking is a well-developed industry in the republic. The market of secondary wood waste is well developed in Latvia as well. It functions fully on the basis of market conditions, where the volume of demand and offer, as well as prices, is determined by the
market. High volumes and comparatively low prices make this market attractive, which increase the export opportunities, for example, in Sweden and Germany. However, there are reserves here, since the remaining parts of wood work and firstly standing in the form of stumps because the process is not mechanized which decreases the efficiency of wood use and deteriorates ecological situation.

Density of using wood in general balance of primary energy resources comprises 24%. It is used for central, local, as well as individual heating. The majority of its use is in farming.

Coal
Coal is one of the main energy resources in the world. Coal deposits are around the world, and it differs according to its types (mainly coal and lignite) calorific value, method of deposition, the volume of reserves and production, delivery distance, cost and production costs, and other factors. In Latvia the main type of coal used the coal form Kuzneck deposit (Kuzbas) and Doneck (the Ukraine). Lignite from Polish, near Moscow and Tver deposits.

Table 3. Advantages and disadvantages of energy sources

<table>
<thead>
<tr>
<th>Energy type</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind energy</td>
<td>1. The presence of the wind climate (usually the seaside); 2. Endless resource; 3. Low cost of maintenance.</td>
<td>1. The source is not stable and predictable; 2. Not evenly placed; 3. The production technology is very expensive; 4. Optimum wind velocity is 10-15 m/s (average rate in Latvia 6 m/s); 5. Land areas excluded from use.</td>
</tr>
<tr>
<td>Hydro energy</td>
<td>1. No hazardous waste; 2. Cheapest source of energy; 3. Low operating costs; 4. High efficiency.</td>
<td>1. Negative impact on the environment (flooding, fish migration); 2. Changes to riverbanks occur; 3. High financial costs and investment in technology; 4. Shallowing of rivers.</td>
</tr>
<tr>
<td>Wood</td>
<td>1. Use of sustainable resources; 2. Low production costs.</td>
<td>1. The possibility of increasing the sources; 2. High investment costs for infrastructure; 3. Fluctuations in consumption are difficult to control.</td>
</tr>
<tr>
<td>Coal</td>
<td>1. Large selection of suppliers; 2. Lower cost, especially in comparison with natural gas.</td>
<td>1. Harmful to the environment energy source 2. Pollution; 3. Dependence on imports.</td>
</tr>
</tbody>
</table>

Source: Developed by authors (Energy and Automation No (01)2008; Energy and World No. (1) (2008)

The Baltic region of energy supply is an isolated enclave, although not as big as Central Europe and Scandinavia both for the production and for energy distribution. To solve the problem of the Baltic region and Latvia on the whole and its full introduction on the basis of equality and unity on EU market, it is necessary to solve the following problems:

- to reorganize the structure of production, distribution and use of electricity;
- to provide technical switch over of the electric networks in the common EU energy system when necessary;
- to regulate market mechanics for use of energy market.
To a greater extend the first task has been solved by means of norm directives from the EU by reorganizing the systems of generation, supply and distribution of electricity. The following tasks are still topical in technical, legal and economic aspects and are still waiting to be solved.

Conclusions and Suggestions

The main aim of energy industry development is to provide qualitative, sufficient and reliable in long term perspectives volume of energy sources both for economics and for inhabitants generally. Thus, it is important: general integration of EU energy sector, efficiency increase of primary energy source and sustainable source use, energy saving, energy efficiency of the buildings on the basis of common political and legislative norms and directives, applying technical and economic sanctions. The responsibility for efficient use of primary and secondary energy sources is fully on the EU member countries, which on the basis of their capabilities and preferences can define the structure and energy processing cycle.

When liberalizing the energy markets in Latvia there are considerable difficulties, thus, in electricity this is a monopoly position of state owned enterprise Latvenergo plc, on the gas market - Latvijas Gāze, the majority of the stake is owned by the Russian company Gazprom.

Recently, according to the EU directives there has been the liberalization of energy source market, although there are still some problems to be solved:
- electricity production, supply and distribution structure reorganization (the problem solution is on its final stage);
- development of technical opportunity to switch the energy networks over to other EU member countries;
- development of mechanism to regulate electrical energy market of all EU countries.

In the basis of safe electricity supply there is practically an old principle: generating domestic production and a permanent, long-term and secure energy imports. When developing new energy capacity, it is important to assess accessibility, use efficiency and other parameters of solar energy, hydro energy, wood, coal and other energy sources.

Application of sustainable energy sources has a range of obvious advantages if compared with traditional ones:
- application of sustainable energy sources allows decrease of environment pollution level and cut costs on power plant waste recycling;
- sustainable sources are inexhaustible;
- pay-back period of energy facility construction based on sustainable energy sources is significantly shorter than that of fossil fuel power plants;
- the costs of providing decentralized energy consumers and smaller regions are lower;
- sustainable energy sources are closer to the consumer, which cuts transportation costs.

Energy systems on the basis of sustainable energy sources enhance sustainable development of economics and environment protection. This obviously emphasizes the perspective of energy system development in Latvia.
- Application of sustainable energy sources in local conditions has different advantages, but for the electricity plant building there are significant restrictions;
- For building wind power plants as a basis, it is necessary to project wind directions and large capacities, as a result high investments and large spaces. If wind generators are placed separately, then the reserved capacity should be 30% lower from stated, when the density of wind generators is higher in one place the reserved capacity will grow up to 50% from stated;
- At electricity plants on sustainable sources, such as biomass, it is easier to use wood, including wood waste, since they are in use for a longer term;
- To use solar energy big investments are necessary, short term winter period and high solar activity.
On the basis of all the points mentioned above, these technologies are not applicable in Latvia as base technologies.

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SUSTAINABILITY OF INTERNATIONAL BUSINESS THROUGH TRADE SPECIALISTS’ EDUCATION

Ignas Dzemyda¹, Greta Zacharevič², Zlatko Nedelko³

¹²Vilnius Gediminas Technical University, Saulėtekio str. 11, LT-10223, Vilnius, Lithuania
¹Mykolas Romeris University, Ateities str. 20, LT-08303, Vilnius, Lithuania
³University of Maribor, Faculty of Economics and Business, Razlagova 14, 2000 Maribor, Slovenija

E-mails: ¹ignas@mruni.lt; ²greta.zacharevic@yahoo.com; ³zlatko.nedelko@uni-mb.si

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Abstract. The article aims to study improvement of the international trade specialists’ education for sustainability of international business. In the article is researched improvement of the international trade specialists’ education. In the article is presented concept, current issues and problems of international trade specialists’ education improvement in the context modern human resource education theories. The results of the research can be used for trade specialists and academia study programs managers. The article presents insights about international trade specialists’ education improvement methods based on Finland practice. Results of this research finding indicate the direction in which should be improved international trade specialists’ education. The results of the practical analysis of qualification requirements could be implemented in business and academia organizations to develop practical skills of international trade specialists. The main finding of the article suggests, tat export is the main part of the international trade, so the country in order to achieve good results in international trade should have educated and highly qualified international trade specialist. It follows that the country must sufficient funds higher education, science and technology development.

Keywords: sustainability, international business, international trade, export development, Lithuania, Finland, education

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JEL Classifications: F20, F60, M160

1. Introduction

Under the circumstances of globalization the knowledge-based society is essential factor, where education is becoming one of key factors of sustainable entrepreneurship and sustainable development (Wahl, Prause 2013; Bileišis 2014; Išoratė et al. 2014; Figurska 2014; Garškaitė-Milvydienė 2014; Lankauskienė 2014; Litvaj, Poniščiaková 2014; Peker et al. 2014; Raudeliūniienė et al. 2014; Scaringelli 2014; Šabasevičienė, Grybaitė 2014; Tvronavičienė 2014; Vasiliiūnaitė 2014; Guruz, Scherer 2014; Cuneo et al. 2014; Barberis et al. 2014). The nation’s success in international markets and its economic and social progress will increasingly depend on education, lifelong learning opportunities, creation and application of specific knowledge for sustainability...
of international business, which is closely related to innovation implementation (Lankauskiene, Tvaronaviciene 2012; Tvaronaviciene 2012; Raudeliunien et al. 2014; Tvaronaviciene 2014; Lapinskien et al. 2013; Lapinskien et al. 2014; Lankauskiene, Tvaronaviciene 2013; Maciulis, Tvaronaviciene 2013; Vosylius et al. 2013; Dudzevicute et al. 2014; Guruz, Scherer 2014; Cuneo et al. 2014; Barberis et al. 2014). For most nations, international trade accounts for a large percentage of gross domestic products and for developing nations may be the single biggest economic driver, serving as the main catalyst for decreasing poverty while increasing access to education, healthcare and a better standard of living. Human resources and analytical skills of international trade specialists plays main role in this global competition for participation on international markets making international business more sustainable. Business schools face great challenges and opportunities in educating future leaders who can work across countries and cultures (Lourdes Dieck-Assad 2013). In order to achieve this success we need qualified international trade specialists, it means that international trade education programs should be adapted to international business challenges and sustainability. A more active involvement of universities is necessary to increase the internationalisation background among entrepreneurs, as well as to enhance the skills and motivations of entrepreneurs (Lafuente et al. 2015). International trade specialist’s education improvement can be very influential in achieving sustainability of international companies. Traditional human resources education theories should be modified, taking into account the competitiveness and challenges of international trade markets. It follows a necessity of new or modified international trade education programs which would combine human resource education and international trade theories in the context of sustainable international business. The article aims to study improvement of the international trade specialists’ education for sustainability of international business.

2. Improvement of international trade specialists’ education for sustainability of international business

Economically developed countries with relatively small domestic market economic analysis shows that in order to ensure stable economic growth, export expansion becomes very important. Export volumes typically account for a large share of GDP. Globalized economy becomes increasingly open, there is a need for sustainability of international business. Export benefits companies should already be sufficient incentive to engage in exports, but for the exports development the state can provide the necessary support for business in many ways, helping to develop competitive products and increase export sales (Jatulevicien 2009). There is a rising global concern that centers on creating an ecologically, socially, and economically sustainable world for current and future generations (Stead and Sread 2014). The complexity involved in introducing and/or enhancing education for sustainability into undergraduate management curricula should not be underestimated (Fisher, Bonn 2011). Fisher and Bonn (2011) notes, that sustainability is not a subject per se because it is too abstract, too theoretical and too broad; there is a lack of qualified staff to teach it; the resources needed to incorporate sustainability cannot be justified; sustainability has no scientific basis and it is a fashion/ fad. Sustainability education should be integrated in learning curricula according qualification requirements for international trade specialists.

A strong export base is generally regarded as a key component to economic growth. Export is a key determinant in achieving economical growth of the state and a higher level of competition in the domestic market, but there is no proof that export promotion made by the state is efficient to stimulate export activities (Dzemydait et al. 2012). Exporters are usually considered to be high-performance firms for two reasons: when competing in foreign markets exporting firms generally incur higher trade barriers and face different consumer tastes and tougher competition; exporting additionally makes firms more easily aware of potential innovations taking place abroad and they may assimilate these in order to improve their position both in domestic and foreign markets. This learning by competing effect may also spread over local firms and benefit them indirectly. Human capital is one of the most important pillars sustaining countries economy growth as well as its competitiveness in the knowledge-based world (Daugelien, Marcinkevicien 2009). Evald et al. (2011) indicate that while human capital and social capital influence the level of intended export, cognitive characteristics, such as self-efficacy and risk aversion, do not seem to influence entrepreneurs’ intended level of export.
The governments recognize the importance of human capital accumulation, its input into the nation’s development. Therefore various programs which help to attract the knowledge workers are implemented. It is widely recognized, that countries development depends on such factors as learning, researches, innovation creation as well as on collaboration with other countries. Isolated economy is not able to be advanced and competitive in the international level. Therefore, highly skilled human capital appears to be as one of the most important elements, contributing to countries economy progress. With the continuing expansion of the global market comes the need for professionals familiar with the intricacies of international trade. Companies and organizations—both large and small—seek out international trade specialists to provide guidance and to offer expertise on any number of issues related to foreign trade, including import/export customs law compliance and custom brokerage, free trade agreements and trade law compliance, financing and logistical management, navigating foreign trade barriers including licensing and permits, trade restrictions and tariffs. Aw et al. (2007) estimate firms’ discrete decisions to participate in the export sector and/or make investments in research and development (R&D) and/or worker training. They then examine how participation in these activities influences a firm’s future productivity trajectory using a selection model that accounts for the endogenous decision of a firm to exit production. Throughout the analyses they consider the potential complementarities between exporting and investing in R&D and worker training. The analysis of the Taiwanese enterprise data, they found that the export activity, R & D and employee training positively and significantly correlated with company performance index. Businesses that are simultaneously exported and invested in R & D and employee training worked are about 10 to 17 per cent more efficient than those that only export.

Jakutis et al. (2007) analyzed the factors of export development in Lithuania. They carried out Lithuanian export factors correlation analysis. Exports are not only a function of GDP, because it depends on other random factors (investment, construction volume of funds for education and science, information technology development and so on.). However, experience shows that the average export is a function of GDP, these sizes relate correlation dependence. Calculations showed that the volume of exports and GDP correlate quite strongly. Even more export correlates with education and training funds and foreign direct investment. The weaker exports dependence is between information technology sector and construction output (Jakutis et al. 2007). Export development factors over the past several decades have changed dramatically. Gomez-Mejia (1988) presented the results of empirical study of long-term American businesses and found out the main factors that impede the development of export: CEOs are afraid to engage in a risk-intensive international market; lack of promotion of foreign trade policy, export subsidies, information and so on; internal company factors (Gomez-Mejia 1988). Gashi et al. (2014) highlight the particular importance of the human and technology-related factors to the export behaviour of small and medium enterprises in transition countries.

Consequently, staff training content should include deliberate and purposeful and spontaneous education, self-education and self-improvement, continuous learning throughout their lives. It is therefore evident that the staff development process characterizing factors are personnel management steps: staff needs planning, staff recruitment and selection, adaptation of staff, staff evaluation, staff career planning, training of staff. The above factors have recently become one of the most important sources of competitiveness of the organization. Training and technical assistance programs should stimulate the interaction between exporting enterprises and entrepreneurs with exporting intention in order to provide the latter with experience which can be critical for the development of more successful export-based international strategies (Lafuente et al. 2015). Therefore, the training for personnel development concept may be formulated as follows: staff is developed purposefully using the unique characteristics of human resource capital for ensuring the constant formation and maintenance of the organization competitive advantage.

Organization human resource development process should be focused on their efforts activation, in order not only to reveal their individual potential and skills, but also maximize their use and development. In this way, by putting personnel policies in education, it is appropriate seek to better reveal the individual employee skills and potential opportunities and maximize use of the available investment. This will prove that education
oriented to the future requirements is more significant for the organization than the investment in the instant (of today) skills. In the area of international trade it could be direction to sustainable international business. There is number strategic issues regarding the type of education that business schools should offer from a global perspective, aimed at developing business leaders/managers endowed with knowledge, values, and cross-cultural intelligence to seek progress for their communities, their businesses, and society at large (Lourdes Dieck-Assad 2013). These goals must be achieved in a world of multilevel access to education and jobs with a more equitable array of opportunities for both developed and developing markets (Lourdes Dieck-Assad 2013). Makrini (2015) identifies the lack of significance between educational background of the decision maker and export success when measured by perceived export success and perceived export achievement that can be explained by the fact that perhaps formal education may play a less important role in small entrepreneurial companies. The managers may have accumulated much informal education that may compensate for their lack of formal education.

In sum we can identify potential problem of international trade specialists’ development. There is a need to develop and invest in the education of researchers for sustainability of international business. Changing economy, strengthening the importance of knowledge, should be taken into consideration by professionals able to operate and develop in the knowledge economy and do international business more sustainable.

3. International trade specialists’ qualifications for sustainability of international business: the analysis of qualification requirements of international trade specialists’ in Lithuania and Finland

International trade specialists education improvement in developing sustainability of international business could be analysed from the aspect of the qualifications what should have the international trade specialist. The analysis is based on Lithuanian and Finland companies’ job advertisements and the qualifications required for export specialists. The aim of this research is to identify what are the qualities and abilities that must have employee developing company activities in foreign markets. In order to achieve this, the online portals where job offers are published, was researched. The research was carried out in 2014 during the month of September – October. In this period were selected 25 job advertisements for export manager offered in Lithuania and 25 in Finland. The reviewed job advertisements portals were presented in Table 1.

Table 1. Lithuanian and Finnish job advertisements portals

<table>
<thead>
<tr>
<th>Lithuanian job advertisements’ portals:</th>
<th>Finnish job advertisements’ portals:</th>
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<tr>
<td>• <a href="http://www.cv.lt/">http://www.cv.lt/</a></td>
<td>• <a href="http://www.jobsinhelsinki.com/">http://www.jobsinhelsinki.com/</a></td>
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<td>• <a href="http://www.cvonline.lt/">http://www.cvonline.lt/</a></td>
<td>• <a href="http://www.ejobs.fi/">http://www.ejobs.fi/</a></td>
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<td>• <a href="http://www.cvbankas.lt/">http://www.cvbankas.lt/</a></td>
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<td>• <a href="http://www.cvmarket.lt/">http://www.cvmarket.lt/</a></td>
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<td></td>
<td>• <a href="http://hae.monster.fi/">http://hae.monster.fi/</a></td>
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</table>

Source: authors

In both counties were analysed job offers, where work is proposed for export/sales managers and export/sales directors. Comparative analysis of qualification requirements for export development specialists in Lithuania and Finland (Table 2).

These advertisements often indicate the nature of the proposed work in Lithuania:

- Determine export opportunities, and trading partners search in foreign countries;
- Company’s production/service export organization;
- Search customer, customer needs analysis, the formation of the assortment;
- Handling budgeting, profitability and sales forecasting for the assigned markets;
- Maintaining contacts with existing partners.
In job advertisements for the export director the requirements are indicated similar to the export manager. There are added such requirements as strategic thinking and the ability to organize teamwork. Export director job description in Lithuania: company's export strategy preparation and implementation; search new partners and customers in foreign markets, negotiation, sale; analysis of market situations, the customers’ needs analysis; marketing strategy in the market preparation and implementation; company’s presentation at international exhibitions. In large companies export specialists are usually selected by the companies themselves as they have well developed the department of human resource management. The small enterprises in most cases provide this to staff selection companies.

Table 2. Qualification requirements for export development specialist in Lithuania and Finland

<table>
<thead>
<tr>
<th>Lithuania</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Higher education - preferably economics or management;</td>
<td>• Higher education - preferably in a business area in which the company operates;</td>
</tr>
<tr>
<td>• Knowledge of foreign languages - usually referred to English, Russian languages and Polish language would be an advantage;</td>
<td>• Foreign languages – fluent in English, Swedish/German/French is a big plus;</td>
</tr>
<tr>
<td>• Good communication and negotiation skills;</td>
<td>• Strong communication skills;</td>
</tr>
<tr>
<td>• Computer literacy;</td>
<td>• Proven negotiation skills;</td>
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<tr>
<td>• Results-oriented.</td>
<td>• Knowledge of the area of business specialization;</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of the specifics of foreign markets - culture, laws, etc.;</td>
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<tr>
<td></td>
<td>• Knowledge of etiquette;</td>
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<tr>
<td></td>
<td>• Deep understanding of selling;</td>
</tr>
<tr>
<td></td>
<td>• Knowledge of the tricks of the trade;</td>
</tr>
<tr>
<td></td>
<td>• Capability to manage complex situations and to contribute the sales process and offerings.</td>
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</tbody>
</table>

Source: authors

The nature of the work (job description) in Finland is similar to that in Lithuanian websites published advertisements. A comparative analysis showed that the qualification requirements for export specialists differ. The main difference is that in the Finland job advertisements as the main feature of the export specialists is the specialist knowledge of the business specifics in which the company operates. As well as Finland export specialist candidate should have a good knowledge of foreign markets (their laws, culture), of the tricks of the trade, the rules of etiquette, should have deep understanding of selling process and be capable to manage complex situations and to contribute the sales process and offerings. Lithuanian export specialist from the mentioned requirements should only have good negotiation skills. Finland more emphasize the specific qualification requirements which requires analytical thinking while in Lithuania is enough to have this mentioned basic qualification requirements. Therefore, a company that wants to develop a successful business in foreign markets should take into account the Finish practice, as the competence of employees must be adequate foreign partners’ staff competence. In such cases, the success of the negotiations guaranteed. Identified the qualification requirements needed for international trade specialists’ such as export/ sales managers based on the Lithuanian ad Finland labour market it is useful to analyse what study programs are offering for international trade specialists in both countries, and if the higher education programs provides students with relevant qualification requirements.

The comparative analysis of qualification requirements for international trade specialists in Lithuania and Finland showed that in the Finland job advertisements as the main feature of the export specialists is the specialist knowledge of the business specifics in which the company operates. Finland more emphasizes the specific qualification requirements which require analytical thinking while in Lithuania is enough to have the basic qualification requirements. Therefore, a company that wants to develop a successful business in foreign markets should take into account the Finland country practice and the competence of employees must be adequate foreign partners’ staff competence. In such cases, the success of the negotiations guaranteed. Finland practice should be taken into account as it is a country that, in a relatively very short period, has transformed itself into a knowledge economy. In recent years, it has been consistently ranked among the top performers in international competitiveness rankings. Measured by many indicators related to the knowledge economy, it
has been ranked first. Openness to international trade and international foreign investment, high level of education, excellent achievements in innovation has allowed Finland to play a leading role. In order to achieve international trade balance Lithuanian export promotion must be oriented to skilled human resources able to create, sell and export of goods and services.

4. The analysis of higher education funding and international trade development in Lithuania

The analysis of higher education funding let’s start from the analysis of Lithuanian expenditure on R&D development. R&D expenditure structure could be analysed by sectors of performance (Fig. 1).

![Fig 1. R&D expenditure in Lithuania by sectors in 2003-2013, million euro](image)

Source: prepared by the authors according to the data of the Department of Statistics to the Government of the Republic of Lithuania (2014)

Most of the expenditure for science and technology development is released by the higher education sector. On average the higher education sector on R&D development spent 117 million euro per year, which is about 53 % of total expenditures for R&D. It is worth to check do we have some benefit for international trade from spending for R&D development and whether there is a correlation between export revenue and expenditure on science and technology development.

Jakutis et al. (2007) export factors correlation analysis showed that the volume of exports strongly correlates with education, science and training funds. For correlation analysis between export revenue and R&D expenditure in Lithuania, there was selected the date of Lithuania's export income and higher education, government and business sector spending on research and development. Correlation analysis allows determining what factors most influence the test object. Statistical correlation is measured by what is called coefficient of correlation (r). Its numerical value ranges from +1.0 to -1.0. When r is positive, it means that with increasing value of X increases and Y, and when r negative - on the contrary - X increases, Y decreases.

Based on available statistical data was calculated and estimated the correlation coefficient. The results of this analysis are presented in Table 3.

<table>
<thead>
<tr>
<th>Table 3. The results of correlation analysis between exports and expenditures on R&amp;D in Lithuania</th>
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<tbody>
<tr>
<td>coefficient of correlation (r)</td>
</tr>
<tr>
<td>t-statistic</td>
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<tr>
<td>t critical value (degree of freedom 0.05)</td>
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</tbody>
</table>
Between exports revenue and expenditure on science and technology development there is a very strong positive relationship (r = 0.96). This means that the change in one variable (exports revenue) is accompanied by a change in the other (expenditures on R&D). This tendency perfectly reflects Figure 2.

![Figure 2. Lithuanian exports and R&D expenditure in 2003-2013, million euros](image)

**Source:** prepared by the authors according to the data of the Department of Statistics to the Government of the Republic of Lithuania (2014)

### Table 4. SWOT analysis of international trade specialists’ in Lithuania

<table>
<thead>
<tr>
<th>Strengths:</th>
<th>Weaknesses:</th>
<th>Opportunities:</th>
<th>Threats:</th>
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</thead>
<tbody>
<tr>
<td>• According to the statistical data Lithuania has a large number of educated people. That means people in Lithuania are receptive and willing to learn science;</td>
<td>• Disproportionate number of high institutions graduates of technological, physical, biomedical and social sciences. Very large number of social science graduates and low technological, physical and biomedical sciences graduates;</td>
<td>• A large number of management, business administration and law professionals, which could be an advantage for the counties' international trade;</td>
<td>• Negative attitude to business cooperation with universities in the preparation of suitably qualified human resources;</td>
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<tr>
<td>• A strong and broad system of higher education;</td>
<td>• Low expenditures (the higher education sector, government and business) for science research and development in Lithuania and low public funds for higher education;</td>
<td>• Lithuania in terms of education is ahead of many EU countries especially neighbors Latvia and Estonia.</td>
<td>• Narrow specialists’ preparation caused difficulties for businesses choosing appropriately qualified staff;</td>
</tr>
<tr>
<td>• Low levels of the unemployment people with higher education.</td>
<td>• Outdated international trade specialist education programs;</td>
<td>• Too theoretical knowledge of graduates - the lack of practice, training new professionals regardless of the needs of the industry;</td>
<td>• On the basis of the distributions of high institutions graduates by field of study in Lithuania there are more specialists who are able to prepare for realization and to realize more than specialists who are capable of developing high-tech products and services.</td>
</tr>
</tbody>
</table>

**Source:** authors
In order to determine if these factors are really addicted need to assess the statistical significance of the correlation coefficient. Assessing the correlation coefficient statistics $t$ was compared with $t$ critical distributed according to Student's $t$-test. $T$ statistic is higher than critical value of $t$ this means that the calculated correlation coefficient is significant (Table 3).

The situation with public funding on higher education is the same as with funding on R&D development. Lithuania expenditures are relatively small in comparison with other EU countries. For instance, Finland which take 1st place according to the global ranking in higher education pillar spent 3,388,9 million for higher education in 2011, when Lithuania only 742,5 millions. However, Lithuanian funding for higher education increased by 86% from 2004. Moreover, compare with the neighbour countries Latvia and Estonia, Lithuania about twice more spent on higher education.

In sum, funding for higher education and science are the factors that have a direct influence on exports revenue. The correlation analysis showed that costs for higher education, science and technology development increase export growth. Export is the main part of the international trade, so the country in order to achieve good results in international trade should have educated and highly qualified international trade specialist. It follows that the country must sufficient funds higher education, science and technology development. On the basis of previously conducted analyses of international trade specialists’ education in response to the international trade below is presented SWOT analysis of international trade specialists’ (Table 4). Lithuania is among countries that are at least invested in the development of R & D (ahead of only Latvia, Bulgaria and Estonia). The situation with public funding on higher education is the same as with funding on R&D development. Lithuania expenditures are relatively small in comparison with other EU countries.

Conclusions

Lithuania has a large number of educated people and low levels of their unemployment. SWOT analysis of Lithuanian international trade specialists’ education in response to the needs of international trade identify the qualified people and their willing to learn science as the main strengths for the developing international trade. Highly educated and appropriately qualified people could be as the main factor for development the Lithuanian exports of high value-added products and services to ensure sustainability of international business. Lithuania must create an economy based on qualified human resources. The knowledge-based economy could help the country to become innovative and develop international trade in response to the changing environment and needs for sustainability of international business. Lithuanian business enterprises requested the qualification requirements for international trade specialists’ does not meet the qualification requirements for international trade specialists in foreign countries. Therefore, a company that wants to develop a successful business in foreign markets should take into account this as the competence of employees must be adequate foreign partners’ staff competence. Too theoretical knowledge of graduates - the lack of practice, training new professionals regardless of the needs of the industry.

For the development of international trade and sustainability of international business it is important properly prepare international trade specialists. The employees of companies precede all innovative processes, people are considered as the most important element of the modern organization for sustainability of business. The analysis of qualification requirements for international trade specialists in Lithuania and Finland revealed that Finland more emphasize the specific qualification requirements which requires analytical thinking and the specific knowledge of the area in which the company operates while in Lithuania is enough to have basic qualification requirements. By these terms international business is more sustainable in Finland than in Lithuania. In order to prepare properly qualified personnel companies should work closely with institutions of higher education. Like in Finland entrepreneurs, professors and doctors share their knowledge at universities and thereby contribute to the preparation of qualified professionals in the university. Contributing to the preparation of professionals, companies can directly contribute to and influence the development of study.
programs. In this way developed study programs will ensure that international trade specialists’ qualifications will be developed in response to the challenges for international business.

Funding for higher education and science are the factors which have a direct influence on exports revenue. The correlation analysis showed that costs for higher education, science and technology development increase export growth. Export is the main part of the international trade, so the country in order to achieve good results in international trade should have educated and highly qualified international trade specialists. It follows that the country must sufficient funds higher education, science and technology development. As the correlation analysis showed expenditure for science and technology development increase export growth. Funding for higher education and science are the factors which have a direct influence on exports revenue. Export is the main part of the international trade, so the country in order to achieve good results in international trade should have educated and highly qualified international trade specialist. It follows that the country must sufficient funds higher education, science and technology development.

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