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PROFILE OF A LONE WOLF TERRORIST: A CRISIS MANAGEMENT PERSPECTIVE

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Abstract. This paper focuses on terrorist attacks carried out by so-called ‘lone wolves’ or ‘lone actors’. It provides an analytical evaluation of the basic characteristics of these attackers and discusses possible access to their identification in society. To create the profile of a ‘typical’ lone wolf, we collected information from a database of lone wolves who committed their terrorist attacks in the United States, Canada, the European Union, Switzerland, Norway and Australia from 1998 to 2016. Based on these data, it was demonstrated that lone wolves are not homogeneous group, therefore, there is no one ‘typical’ lone wolf. Instead, three main groups of lone wolves were identified: 1) lone wolves with a criminal past, 2) lone wolves with a mental illness and 3) young lone wolves coming from minority groups in the country. These characteristics could be used as an auxiliary tool by state security forces during identification of potential lone wolf terrorists.

Keywords: terrorism; lone wolf; crisis management; profile; identification


JEL Classifications: F01, F02

1. Introduction

Terrorism constitutes one of the most serious problems of the current security environment and its management. Identifying the roots of terrorist activities is one of the decisive factors of preparedness of security systems for individual states (e.g. Lietuvnikė et al. 2018; Kuril 2018; Todorov et al. 2018; Lincényi 2017; Šišulák 2017). Early predictions and measures are important aspects in the fight against terrorism. Adequate security system preparedness to terrorist threats requires an analysis of relevant information that could consequently be used during the formation and implementation of the anti-terrorism policies of a state. Within the phenomenon of terrorism as a method of using force or threats of violence, carried out by individuals, groups of individuals or state-supported actors, it is possible to follow two lines of development: terrorism organized by terrorist groups and terrorism performed by individuals acting independently. This paper focuses on the latter one – terrorist acts carried out by ‘lone wolves’ or ‘lone actors’, as a specific threat to contemporary society.

In publications and databases (e.g. Ellis et al., 2016; Hamm and Spaaij, 2015; Spaaij, 2010), we can find several definitions characterizing the term lone wolf in the field of terrorism. For example, Hamm and Spaaij (2015) see a lone wolf quite strictly as an individual who: 1) acts alone; 2) does not belong to a terrorist group
or network; 3) acts without influence of a leader; 4) directs his tactics and methods by himself. On the other hand, Ellis et al. (2016) used for their CLAT database a wider definition, when they admitted that lone actor(s) may be an individual, dyad or triad, whose decision to act is not directed by any group or other individuals, and they are neither directly supported by them in the planning, preparation and execution of the attack. In contrast to the narrow definition of Hamm and Spaaij (2015), the wider definition of Ellis et al. (2016) allows a lone wolf to be a member of terrorist or extremist groups, if he carries the terrorist attack independently of that group. However, there is consensus that a lone wolf performs his terrorist attacks without direct influence and support from any terrorist group or other individuals. This implies that lone wolves act on their own, and it is very difficult to identify their objectives, intentions and methods for carrying out their attacks. Although some lone wolves have links to extremist or terrorist groups, the majority of them do not have any such connections (Ellis and Pantucci, 2016a). In the case of lone wolves, it is not possible to infiltrate any structures or converge purposefully. Such procedures cannot be applied in this category of attackers at all. This approach increases the effectiveness of the impact of their attacks and reduces the possibility of prediction and prevention against them. Therefore, lone wolves constitute a serious challenge for an existing security system for the protection of the population.

Many recent studies highlighted a tendency for lone wolves to be loners (Gill et al., 2014; Gruenewald et al., 2013; McCauley and Moskalenko, 2014; Spaaij, 2012). On the other hand, in other studies (e.g. Ellis et al., 2016), it was suggested that lone wolves are not necessarily completely socially isolated, as it has been previously assumed. Ellis et al. reported that only 28% of lone wolves recorded in the European CLAT database were socially isolated, while 46% of lone wolves somehow signaled their intentions or extremist attitudes to others, usually to their friends or family members before they actually committed a terrorist act. Nowadays, however, expressing views on the Internet is of the same significance. Based on these results, Ellis et al. suggested that teaching the public to recognize the extremist behavior in people in their surroundings and give them the opportunity to report this behavior is an important tool in the possible tactics how to fight against lone wolves. On the other hand, some lone wolves are well aware of their weaknesses of this kind, e.g. Anders Breivik, probably the most successful terrorist in this field. He wrote in his manifesto:

“You will increase your chance of being apprehended by 100% for every person you involve. Do not trust anyone unless you absolutely need it (which should never be the case). Do absolutely everything yourself (Berwick, 2011, p. 853).”

Autonomy in preparation of terrorist acts is in our opinion the most suitable characteristic of lone wolves. However, this does not mean that they do not communicate with others. Moskalenko and McCauley (2011, p. 124) suggested that a lone wolf is actually dependent on others in some way: “The lone-wolf terrorist depends on others for ideas, if not for action.”

The analyses of the current existing capabilities of intelligence services indicate that there is no effective method or possibility of an effective way of warfare with lone wolves. Within security management, governments could allocate financial resources to intelligence services to increase the number of employees and adopt new intelligence technology, but in the case of lone wolves, these measures do not have to be sufficiently effective. Nowadays, there are numerous means for tracking suspects and their activities (wiretapping, CCTV systems, GPS locators, monitoring PC, etc.). A prerequisite for the successful use of these resources, however, is a previous identification of suspects. The idea of continuous mass surveillance over a number of years, before someone showed any aggressive tendencies, is almost unreal. Moreover, the fact that the attack may come from a person who has never fallen under slightest suspicion speaks against this procedure. In accordance with the above-mentioned assumption, it is desirable to identify and define the basic characteristics or indicators of the behavior of possible lone wolves. The complexity is hidden in the principle of comprehensive understanding of their thinking, actions and intentions.
2. Possibilities of lone wolves identification

In this paper, the theoretical model of terrorism by Kemmesies (2006) was used for the selection and grouping of traits that could be useful in the process for identification of a lone wolf terrorist. Kemmesies proposed three main factors generating a terrorist. The first factor is the personality of a potential terrorist, which includes traits such as psychical dispositions, life values, knowledge or skills. These traits are adopted by an individual during the process of socialization. This individual level determines the perceptions and interpretation of reality by the individual. The second factor delimited by Kemmesies is ideology. Extremist or terrorist ideology is equally important in the process of terrorist shaping since it plays a key role in justifying the violence. The third factor according to Kemmesies is the environment surrounding the potential terrorist. This environment includes different social structures from the structures of which the potential terrorist is a direct part and directly influence his personality such as family, school or circle of friends, through social structures that affect the individual without actually belonging to them, for example, media, governmental institutions, state security forces or the labor market, to superior social structures such as cultural patterns and values or a shared interpretation of history.

The first indicator that can be used for identification of a lone wolf terrorist is a factor of an individual level. At this level, the emphasis is on the psychological characteristics of the individual. An individual level can be very important for distinguishing lone wolves from radicals with no violent intentions, e.g. Khalil (2014) argues that individual-level stimuli such as vengeance, status or yearning for adventure are often a true cause that leads individuals to engage in terrorist activities. Moskalenko and McCauley (2011) suggested that group identification with some victims could be a psychological state, which allows lone wolves to sacrifice themselves for a common cause.

There has been long discussion about the extent to which terrorists tend to have mental health issues. Plenty of psychological theories of terrorism emerged, especially up to the 1980s. These theories were exhaustively and critically reviewed by Victoroff in 2005 (Victoroff, 2005). His criticism pointed in particular to the fact that these theories were based mostly on speculations, whereas well-established controlled empirical studies were rare. He also argued that there is no such a thing as a “mind of the terrorist”. There are many types or terrorists with different origins, socioeconomic status, motivation, ideology etc. However, it is assumed by some authors (e.g. Bakker and de Graaf, 2010; McCauley and Moskalenko, 2008), that lone wolves could be just the type of terrorists with a high likelihood to suffer some kind of mental disturbances. A few empirical studies (e.g. Corner et al., 2016; Corner and Gill, 2015; Gruenewald et al., 2013; Spaaij, 2010) support this opinion. Especially interesting is the finding of Gruenewald et al. (2013), who observed a statistically significantly higher frequency of mental illnesses in lone wolf far-right extremists compared to other far-right extremists. Corner et al. (2016) came to a similar conclusion when the prevalence of mental illness was analyzed in mass casualty offenders, lone-actors, solo-actors, lone-dyad and group-actor. They discovered that the highest prevalence of mental illness was found in mass casualty offenders, and lone actors, meanwhile the lowest prevalence of mental illness was found in group-actors. They explained this effect by the fact, that “terrorist groups are selective in who they recruit”, while mental illness is definitely not an indicator for a suitable recruit. On the other hand, this selection effect is completely absent in lone wolf terrorists. Corner and Gill (2015) as well as Corner et al. (2016), noticed the fact that many previous studies work only with information whether a given terrorist suffered from a mental illness without accurate clinical diagnosis of the disease. Corner et al. (2016) compared the rate of prevalence of individual mental disease according ICD-10 (World Health Organization, 2010) criteria between lone-actors, group-actors and the general population. In only three illnesses, they reported a significantly higher prevalence among lone-actors compared to the other groups. This effect was mostly pronounced in schizophrenia; whose prevalence among lone-actors exceeded 8 % compared to around 1 % prevalence in the general population.

The second factor is the ideology pursued by the individual. As noted by Pantucci et al. (2015, p. 5), “the phenomenon of lone-actor attacks is not restricted to specific ideology”. Nevertheless, they see three main ideological drivers: 1) right-wing ideas; 2) radical Islamist ideology and 3) self-developed ideology. Commonly, the lone wolves terrorism phenomenon closely relates to a ‘leaderless resistance’ strategy. Joosse (2017) sees leaderless resistance as the ideology that motivates lone wolf terrorism. As was previously mentioned, lone
wolves act on their own. Despite this statement, such persons may sympathize with some terrorist organizations, although they may not be members of them. This fondness strengthens the position, commitment and intentions of the lone wolf in their future actions.

The radical ideology of some lone wolves could be used against them under certain circumstances. As reported by Ellis and Pantucci (2016b), 46 % of lone wolf terrorists in CLAT database indicate in some way their intention to commit terrorist attacks. Moreover, 34 % of lone wolves exhibited changed behavior before the attacks, such as “loss of interest in other friends and other activities not associated with extremist ideology, groups or causes” (Ellis and Pantucci, 2016b, p. 3), which could be indicated by their surroundings. This fact led Ellis and Pantucci (2016b) to highlight the significance of public awareness and their willingness to cooperate with authorities for timely detection of lone wolves. They recommended to ensure programs aimed at increasing public awareness of terrorist threat and the identification of warning signals in their surroundings. They also emphasized the need for cooperation with social media companies, which may facilitate the identification of potential lone wolves on the internet.

The final indicator that can potentially be used for lone wolf identification is the environmental factor. It is not sufficient to examine only the current social situation of the person. An important aspect is the family environment and the upbringing process. Gill et al. (2014) noticed that in their database of lone wolves in the US and Europe, only a quarter was married (24.5%), which is relatively low compared to organized terrorists. In addition, Gill et al. took notice of the fact that despite relatively high educational achievement, the occupation of lone wolves does not often match their education. 40.2% of lone wolves were unemployed, 9.8% student and 23.2% worked in service industry. As indicated by Gill et al., this distribution is diametrically different from the situation of organized terrorists who usually have a job. Regarding the criminal activities of lone wolves, 41.2% had previous criminal convictions. 63.3% of those with convictions had been in jail and 32.3% of those who were incarcerated had adopted the ideology during jail time. Gill et al. also reported that 37.8% of lone wolves had previously engaged in violent behavior and 22.7% had a history of substance abuse.

Apart from the described factors of a lone wolf personality, other important input aspects are the process of radicalizing an individual and communicating his ideas with the external environment. Actually, the process of radicalization is sort of an intersection as well as extension of the aforementioned factors. This process requires exchanging ideas with other people in some form, e.g. direct communication with other people, internet etc. Communication of ideas with other people is usually the cause and effect of lone wolf radicalization at the same time. Signs of radical actions and attempts to impose their ideas on the public can be primary indicators for detecting potential terrorist activities in the future. However, many authors (e.g. Holt et al., 2015; Khalil, 2014; Schuurman and Eijkman, 2015) point out the fact that a radical attitude and extreme actions are not the same. There are many individuals with extreme opinions, but only a slight fraction of them ever take measures to perform a terrorist attack. On the other hand, there are many terrorists, who do not share extreme opinions. Khalil (2014) argues that whereas supportive attitudes for political violence is driven mainly by collective causes, e.g. repression, socioeconomic inequality etc.; contribution to political violence is often caused by individual-level motives. If this were true, what impact does the radicalization of a person actually have on the likelihood of him performing a terrorist act?

Ellis et al. (2016) pointed to the fact that a part of the observed increase in the number of terrorist acts could be attributed to the expansion of the Internet. According to recent statistics, the internet is becoming the most common platform for terrorists to show their conviction and intentions (Zeman et al., 2017). Hamm and Spaaij (2015) bring into focus the significance of the Internet in the mechanism of radicalization in lone wolves in the US. The authors noticed that prior to September 11, 2001 radicalization of lone wolves was associated mostly with their previous membership in an extremist group; since September 11, 2001 the source of radicalization has been gradually replaced by the Internet, online social networks, etc.

The aim of our research was to characterize the profile of a lone wolf terrorist based on the data of lone wolves who have committed their attacks in the United States, Canada, the European Union, Switzerland, Norway and Australia from 1998 to 2016.
3. Methods

In the first step, we created a Lone Wolves Database (LWD), which contains the cases of lone wolves committing their terrorist attacks in the United States, Canada, the European Union, Switzerland, Norway and Australia from 1998 to 2016. We utilized the Global Terrorist Database (National Consortium for the Study of Terrorism and Responses to Terrorism, 2016a) in searching for lone wolves’ cases. From the Global Terrorist Database (GTD), we selected cases marked as ‘Unaffiliated Individual(s)’ in variable Perpetrator Group Name (gname). According to the GTD Codebook (National Consortium for the Study of Terrorism and Responses to Terrorism, 2016b), the ‘Unaffiliated Individual(s)’ is ‘an individual who is not affiliated to a perpetrator group’, which is consistent with the definition of a lone wolf. Nevertheless, as is declared in the Codebook, the practice of marking ‘Unaffiliated Individual(s)’ is inconsistent prior to 1998. From these reasons, only the cases since 1998 were included in the LWD. After identification of 253 suitable cases of terrorist attacks in the GTD, each case was checked manually from internet sources especially bbc.com, cnn.com, dailymail.co.uk, abcnews.go.com and foxnews.com. Unfortunately, in some countries the laws do not allow the publication of full names of convicts, which led to a substantial reduction in the sample size. Based on these sources, a total of 93 lone wolves, who committed 108 terrorist attacks were identified, i.e. their full names were given. For each identified lone wolf, we recorded variables related to the aforementioned factors, e.g. their mental state, family background, mechanism of their radicalization etc. (for detail see Table 1). Unfortunately, it was not possible to trace all the data for all persons. Therefore, the number of observations for individual variables vary from 23 to 84 observations depending on the availability of data.

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<th>Table 1. Review of assessed variables</th>
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<td><strong>Factor</strong></td>
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During statistical analysis, the frequencies were computed for the variants whose frequency exceeded 5%. Variants with frequencies less than 5% were merged into ‘other’ categories. Then, the association between the variables used was assessed using Spearman’s rank correlation coefficient. Before the correlation coefficients were calculated, nominal variables with more than two variants were dichotomized by merging all the variants except for the variant with the highest frequency.
4. Results and Discussion

Based on variant frequencies of observed variables, a preliminary profile of a lone wolf terrorist may be indicated. The vast majority (97%) of our sample was men. There were only three women, Roshonara Choudhry, Kathryn Schoonover and Shannon Richardson. Most from our sample were aged 20–30 years at the time of their first terrorist attack (Figure 1). A notable exception is the case of James von Brunn, a senile Holocaust denier, who was 88 at the time of his attack in the United States Holocaust Memorial Museum.

![Figure 1. Age of first terrorist activity for lone wolves in our sample](image)

Regarding the individual factor, only a limited number of lone wolves in our sample were truly socially isolated (24%, see Figure 2). This is in contrast with the findings of Gill et al. (2014), who observed more than half of socially isolated lone wolves in their sample. However, the assessment of the social isolation of lone wolves is always subjective to a certain extent, which significantly reduces the credibility of this variable. A much reliable information is the history of criminal acts committed by wolves prior to their first terrorist attack. More than half (58%) of our sample had a criminal past, which is consistent with the findings of Gill et al. (2014). The criminal offenses included mostly robbery, burglary, arson, weapons charges, violent activity and extortion. On the other hand, only a minority of them was a substance user in the past (19%).

Based on available data, the presence of some mental disorder appears to be a distinctive feature for lone wolves. In nearly half (43%) of lone wolves, some kind of mental disease was diagnosed before committing the first terrorist attack. This is an even higher number than 31% of lone wolves with a history of mental illness observed by Gill et al. (2014). Moreover, in our sample, another 13% of lone wolves without a history of mental illness were diagnosed with a mental disease during the trial, i.e. after the terrorist act was committed.

Regarding the ideological factor, 55% of lone wolves in our sample expressed radical views before their first attack (Figure 3). These include especially extreme Islamic views (76%) and right wing extremism (18%). As noticed by Ellis et al. (2016), there is significant difference in method of radical views expression. Meanwhile religiously inspired lone wolves tend to express their opinions or indicators of future attack to their friends and family members, right-wing lone wolf terrorists are more likely to use interaction on online social media.
Regarding the environmental factor, almost half (45%) of lone wolves in our sample were in no relationship and were never married, 22% of them were divorced or separated from their spouse after a previous relationship (Figure 4). This is in accordance with the findings of Gill et al. (2014). This result apparently relates to the fact that lone wolves have a relatively low number of children; most of them have no children (57%) and only 20% have more than one children. In 52% of cases, lone wolves from our database were members of some minority group (e.g. immigrants from the Middle East, Asia and Africa) in the country, where they lived at the time of committing their terrorist attacks. On the other hand, the low-income family origin of lone wolves was relatively rare (18%) in our sample. Likewise, the number of lone wolves coming from incomplete families (30%) or being orphans (3%) did not markedly deviate from the values for the common population.
Based on the aforementioned results, it would seem that a typical lone wolf is a male member of a minority group with a criminal past, childless, lives alone, although not necessarily in social isolation, and suffers from some kind of mental disease. However, no lone wolf with all of these characteristics was really observed in our sample. Results of the performed correlation analysis also contradict such a profile of a lone wolf. As seen in Figure 5, the structure of our sample is much more complex. Based on the correlation matrix analysis and traits frequencies (Figure 2–4), four main traits of lone wolf terrorists were identified: criminal past, mental disease diagnosis before first attack, expression of radical views before first attack and minority group origin. While the last two characteristics are moderately correlated (R = 0.56, p < 0.01), there were no other statistically significant correlations between these traits. In fact, a weak negative correlation was found between mental disorder diagnosis and minority group origin (R = -0.24, n. s.). This supports the assumption that lone wolf terrorists are not a homogenous group.

Figure 4. Frequencies of environmental factor levels in our sample
For further analysis, only the individuals with no missing value in the variables corresponding with identified main traits were selected. This reduced sample consists of 43 observations. Table 2 presents some details about the distribution of the aforementioned main characteristics in the reduced sample. As seen in Table 2, only 11.6% of lone wolves in the reduced sample do not have any of the four main characteristics. On the other hand, only 7% of them has a combination of all four traits.

Table 2. Relative frequencies of criminal past (CP), mental disorder (MD), expression of radical views before first attack (RW) and minority group origin (MGO) in 43 lone wolves from our sample with no missing value in these variables

<table>
<thead>
<tr>
<th>Combination of traits</th>
<th>Observed frequency</th>
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</thead>
<tbody>
<tr>
<td>RW &amp; MGO</td>
<td>16.3%</td>
</tr>
<tr>
<td>CP, RW &amp; MGO</td>
<td>14%</td>
</tr>
<tr>
<td>none of given traits</td>
<td>11.6%</td>
</tr>
<tr>
<td>MD</td>
<td>9.3%</td>
</tr>
<tr>
<td>CP, MD &amp; RW</td>
<td>9.3%</td>
</tr>
<tr>
<td>MD, RW &amp; MGO</td>
<td>7%</td>
</tr>
<tr>
<td>CP</td>
<td>7%</td>
</tr>
<tr>
<td>CP, MD, RW &amp; MGO</td>
<td>7%</td>
</tr>
<tr>
<td>MGO</td>
<td>4.7%</td>
</tr>
<tr>
<td>CP &amp; RW</td>
<td>4.7%</td>
</tr>
<tr>
<td>CP &amp; MD</td>
<td>4.7%</td>
</tr>
<tr>
<td>MD &amp; RW</td>
<td>2.3%</td>
</tr>
<tr>
<td>CP &amp; MGO</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Based on these results, three overlapping groups of lone wolves could be delimited. These three categories cover a significant majority of lone wolves in our database. In fact, 83.9% of terrorists in the reduced sample can be included in at least one of these categories:

1) Lone wolves coming from a minority group expressing their radical views:
This group represents almost half of the reduced sample (44.2%). In Figure 5, it can be seen that lone wolves from a minority group tend to express their radical views ($R = 0.56$, $p < 0.01$), predominantly adopting radical Islamic ideology ($R = 0.84$, $p < 0.01$). This corresponds with the fact that these terrorists originate mostly in Muslim Diasporas in western countries. Moderate negative correlation of age at the time of first attack with minority group origin ($R = -0.4$, $p < 0.01$) testify that lone wolves from this group are usually young persons. They may have a mental disorder or criminal past, although it is not typical for them. As seen in Table 2, 31.6% of them had a criminal past, 15.8% a mental disease diagnosis prior to their first attack and 15.8% had both of these traits. A good example of a lone wolf from this category is Dzhokhar Tsarnaev, a young immigrant to the USA who was only 19 at the time when he and his older brother Tamerlan committed the bombing attack at Boston Marathon on April 15, 2013.

The lone wolves from this group are tough to detect due to the relatively low portion of individuals with a criminal past or mental disease diagnosis. However, they are usually young and tend to express their radical views to their surroundings. As was noticed by Ellis et al. (2016), 46% of perpetrators in the CLAT database exhibit some kind of indication of their extreme views or intentions towards others. From these cases, 35% of lone wolves exhibit only their radical ideology, 44% express also their intention to commit a terrorist attack and in 21% shared, even some details about the planned attack. As reported by Ellis et al., lone wolves usually leak the information to their friends and family members or post their opinions on the Internet. This fact possibly provides an opportunity to security forces for early detection and prevent of terrorist attacks committed by lone wolves from this group. One possibility is to convince the public about the need to notice these leakages and report them to the police. Another possibility for taking advantage of this weakness of a lone wolf terrorist lies in the development of automated or semi-automated methods for searching for and identifying radical users on the Internet, such as the method of Scrivens et al. (2017). Given the fact that religiously inspired lone wolves communicate their racial views or indicate their future actions mainly to their friends and family member (Ellis et al., 2016b), the effort should be primary focused on creating strong link and building confidence between the community and the police as suggested by Ellis and Pantucci in their Practical guidance for security practitioners (Ellis and Pantucci, 2016a).

2) Lone wolves with a criminal past:

They constitute 48.8% of the reduced sample. This finding is consistent with the results of Gill et al. (2014), who reported 41.2% of lone wolves had previous criminal convictions. They also gave some interesting details: 63.3% of lone wolves with a criminal history spent some time in jail and 32.3% of them were radicalized during incarceration. Based on the correlation matrix (Figure 5), they may tend to express their radical views before their first terrorist attack ($R = 0.25$, n. s.), although it is far from being the rule. In contrast to the previous group, they adopt various ideologies, not inclining to radical Islamic ideology exclusively. As seen in Table 2, 33.3% of them had a minority group origin, 28.6% a mental disease diagnosis prior to their first attack and 14.3% had both of these characteristics. An example of a lone wolf this group be Jerad Miller: he with his wife Amanda shot three people on June 8, 2014 in Las Vegas. Miller has a rich criminal history including shoplifting, harassing telephone calls and drug offences.

Lone wolves from this group are very difficult to detect due to their relatively weak tendency of expressing their radical views. On the other hand, almost a third of them go through radicalization during their incarceration (Gill et al., 2014), where they are under surveillance and their radicalization could be potentially detected. This, however, would require the carrying out of systematic training of prison staff to increase their ability to detect signs of radicalization in prisoners.

3) Lone wolves with a mental disease diagnosed before their first terrorist attack:

They constitute 39.5% of the reduced sample. Based on the correlation matrix (Figure 5), they are more frequently socially excluded than other categories of lone wolves ($R = 0.52$, $p < 0.01$). They may tend to live single without previous marriage ($R = 0.22$, n. s.). On the other hand, there was no observed tendency for
expression of their radical views before the attack (R = 0.00, n. s.). As seen in Table 2, 17.7 % of them had a minority group origin and 35.3% a criminal past and 17.7% had both of these traits. An example of a lone wolf from this category is Scott Philip Roeder, an anti-abortion militant who shot George Tiller, a well-known doctor in the US who performed late-term abortions, on May 31, 2009. Long before carrying out the attacks, Roeder was diagnosed with possible schizophrenia, however, functioned without medication and medical surveillance. As noted by Ellis et al. (2016a), among lone wolves that have used legally-owned firearms for their attacks, 53 % of them have an indication of some mental health disorder. Lone wolves with mental illness constitute a very interesting group. Due to the fact, that these people have undergone some kind of mental health examination at some point during their lives, there could be a higher possibility of their timely detection or monitoring. On the other hand, in most cases, the mental health examination constitutes the only opportunity for their timely detection. As seen in Figure 5, mental illness diagnosis before a terrorist attack is strongly and statistically highly significantly correlated with the social isolation of the perpetrator (R = 0.52, p < 0.01). It should be taken into consideration however, that this finding differs from the result of Corner and Gill (2015), who failed to find any statistically significant association between mental illness and social isolation in lone wolves. In addition to the tendency for social isolation, lone wolves with mental illness tend to express their radical views less than others. Based on Table 2, only 50 % of lone wolves from the reduced sample with a mental illness and no criminal past expressed radical views before their attacks. Moreover, in accordance with Corner and Gill, no statistically significant correlation between a criminal past and mental illness was found. In the study by Corner and Gill, schizophrenia and associated disorders were the only mental health disturbances associated with acts of violence performed prior to the first terrorist attack. As highlighted by Ellis and Pantucci (2016a), when a future lone wolf is socially isolated, it is unlikely that anyone will recognize and report indications of his extremist behavior or his intention to perform a terrorist attack. In these cases, the mental health practitioner could be the only one person that has a chance to timely detect such a lone wolf terrorist. Corner and Gill (2015) came up with another important piece of information. They found out that lone wolves with mental illness have a significantly higher likelihood of having a spouse or partner associated with a wider movement. They suggested that lone wolves with mental illness may be susceptible to ideological influences from their surroundings.

Recently, Bakker and Zuijdewijn (2016) published a Practical guidance for mental health practitioners and social workers, where they recommended the introduction of measures for wider availability of mental health services, as well as enhancing information-sharing between mental health practitioners and law enforcement, which is also supported by other authors (Chermak et al., 2010; Corner and Gill, 2015; Zuijdewijn and Bakker, 2016). On the other hand, they advise against hotlines where people can report suspicious behavior in persons in their neighborhood, because the high number of expected false positive reports made by non-professionals. Another interesting suggestion by Bakker and Zuijdewijn is their recommendation to prepare anonymized biographies of lone wolves that could be utilized as training materials for relevant actors.

In his critique of research on terrorism, Silke (2001) sees one of the most important methodological issue of published studies in the fact, that a large portion of these studies use secondary data, especially scholarly books and articles, media news services and open government documents. They review all articles and research records published between 1995 and 1999 in two of the most important terrorism studies journals: Terrorism and Political Violence and Studies in Conflict & Terrorism. They discovered that 73 % of published studies in this period are based solely or predominantly on documentary analysis or review. He identified three possible issues connected with secondary data, especially from media sources: 1) questionable accuracy of information presented by the media; 2) biases caused by the non-neutrality of some media reports and 3) misinterpretation of media reports caused by the fact that the reports are not written in scientific language, but are intended for a specific audience.

It should be highlighted that our data are based solely on open sources and as such are subject to the aforementioned issues. The first problem of the data used is their incompleteness. As mentioned in the Methods section, out of 253 terrorist attacks documented in GTD, additional information was found only for 108 terrorist attacks,
resp. 93 lone wolves. Even regarding these cases of lone wolves, there were plenty of missing values. Actually, there were only five cases of lone wolves, which did not contain any missing values in the assessed variables listed in Table 1. The critical question is why this missing information could not be found in open sources. The most probable explanation is that this information was actually unavailable to the media or was found to be uninteresting. This necessarily leads to some kind of bias, since the lone wolves who performed more dramatic and serious terrorist attacks received more attention in media. Due to this bias, the obtained results definitely cannot be compared with the population values. On the other hand, values of correlation coefficients should be unaffected by these kinds of selections. Media can also possibly influence values of observed traits by exaggerating the reality, e.g. by paying more attention to terrorists with an “interesting personal story”, such as a criminal past, dysfunctional family origin etc. However, until this selection is at the level of individual traits and not their combinations, the correlations between traits should not be inflicted. Based on these assumptions, we consider the performed correlation analysis to be sufficiently reliable.

Conclusions

Based on the results of our study, it can be said that lone wolf terrorists in western countries are not part of a homogenous group. It is not possible to categorize and summarize the issue of lone wolves unequivocally. Each actor of this kind is specific in terms of his or her personality, behavior and reasons. In general, however, three main groups of lone wolves were identified: 1) young lone wolves coming from a minority, 2) lone wolves with a criminal past and 3) lone wolves with a mental disease. State security forces could monitor such defined groups of persons under certain conditions within the crisis management system. Closer monitoring of radicals with a criminal past and/or history of mental illness could reduce the risk of a terrorist attack committed by a lone wolf. Regarding young lone wolf terrorists from minority groups, their tendency to reveal their terrorist acts or extreme opinions to their friends or family members appears to be their most vulnerable characteristic, which can be used for their early identification. However, this process requires an active approach from the public, especially those people who are in contact with potential lone wolf terrorists. They have to be convinced of the necessity to notice the indications of future terrorist acts and to report them to the police. Besides that, they must be able to recognize these indications. This requires the transmission of relevant information to the public. Studying the common characteristics of lone wolves could be an important part of the effort of creating a ‘well-informed public’. In fact, a ‘well-informed public’ can play a fundamental and irreplaceable role in the fight against terrorism, particularly against lone wolves. The public could be the force that plays the necessary role of an observer, and draws attention to unusual conduct and behavior of individuals in society.

Acknowledgements

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Abstract. Despite the rising recognition and a growing body of literature on sustainability issues in the military, no comprehensive and systematic review on the topic has been published yet. Accordingly, the aim of this paper was to deconstruct the topic of sustainability in the military context by exploring its genesis, state-of-the-art knowledge and future prospects. Furthermore, the study addressed the question of practical importance about where sustainability in the military is ad hoc or institutionalized into management processes and procedures of organizations. The paper relied on the systematic literature review and used a bibliometric data analysis: citation network and keyword network analysis techniques were employed to select, analyse and interpret the genesis and prospects in the field.

The data suggest there are three dominating research streams in the field: (1) environmentally sustainable solutions, (2) economic (un)sustainability of militarization and (3) social cohesion. The recent research on sustainability in the military marks a new trend where all three fields of sustainability are being integrated. It is also apparent from the analysis that a small but significant share of publications indicates institutionalization of sustainability in the military practice. This is particularly evident in relation to environmental issues.

Keywords: sustainability; military; institutionalization; management; systematic review


JEL Classifications: 032

1. Introduction

Sustainability is becoming a central discussion issue around the future planning of military training, operations and installations. An increasing demand for energy and public pressure to reduce emissions as well as improve recyclability raises a question of how to comply with sustainability requirements while enhancing military capabilities. This issue emphasises the need to understand the genesis of sustainability and at the same time to look at the prospects of its development.

Whenever sustainability issues in the military are discussed, in the first instance, sustainable energy consumption is emphasised. A long-term strategic view on sustainable energy consumption is becoming an integral part of military planning as energy initiatives are binned to the mission capabilities. In parallel to the growing comprehension on sustainable energy consumption, other environmental issues related to military activities are increasingly raising an interest of researchers and practitioners. The data provide evidence that the armed forces are one of the largest polluter on earth (Jorgenson and Clark 2016). Soil contamination of the military bases, caused by military pipeline leaks, transport accidents, as well as the usage of chemical warfare agents raise concerns, especially when military ranges are returned to non-military entities (Pidlisnyuk et al. 2016; Jugnia et al. 2018).
Moreover, the military has an economic and social effect on local communities as military bases and their logistic network catalyse regional economic and social development. As for the military’s role in counter-insurgency operations, it is directly related to job creation (Greenburg 2017). Besides a positive economic effect, the military makes a less favourable impact on social sustainability. Bases and training areas reshape urban infrastructure and as documented in the study (Havlíček et al. 2018), large military bases in the country affect the road network and in some cases cause physical as well as social and economic isolation of communities in remote areas.

Despite the rising recognition and growing body of literature on sustainability issues in the military, no comprehensive and systematic review of sustainability in the military has been published. Accordingly, the aim of this paper was to deconstruct the topic of sustainability in this context by exploring the genesis, state-of-the-art knowledge and future prospects. Furthermore, the study addressed the question of practical importance about where sustainability in the military is ad hoc or institutional (integrated into management processes and procedures of organizations).

The paper is divided into several parts. It starts with research methodology where the systematic literature review is explained as the main method of the study. It is illustrated with a research flow diagram and explicated using data statistics. The second part presents the bibliometric analysis and illustrates an increasing interest in the topic. The third and fourth parts of the paper present results from the bibliographical and content network analyses. Using these two different research methods citation and keyword networks are created. They represent the genesis of sustainability in the military research as well as a new trend in the field; moreover, results identify the fields where sustainability solutions are institutionalized at the organizational level in the military. The paper concludes debating possible future directions of sustainability in the military.

2. Research methodology and data statistics

A systematic literature analysis was chosen as a research method for this study as it uses a well-defined methodology that ensures unbiased evidence through collecting, analysing and interpreting secondary data (Budgen and Brereton 2006). It also allows focusing on concepts, i.e. the study becomes concept-centric as opposed to a widespread and frequently criticized author-centric approach (Webster and Watson 2002).

Systematic literature analysis is used in socioeconomic sciences and humanities, environment, ICT, health as well as other research fields. Regardless of the field, this method is characterized by several steps (Budgen and Brereton 2006; Ritz et al. 2016): (1) the analysis begins with a research question and is followed by a (2) review protocol that defines a strategy for data collection, (3) the analysis provides clear inclusion and exclusion criteria and, finally, (4) it is consistently described to allow replication of the results.

Research Questions. The research questions which should be answered in this analysis relate to the aim and are as follows: (1) To what extent is scientific literature interested in sustainability in the military? (2) Which field of study is most analysed in terms of sustainability in the military? (3) How are research fields connected and how do they change over time? (4) Does sustainability in the military form a comprehensive field of knowledge? (5) What are the fields where sustainability is integrated into the organizational management, i.e. sustainability is institutionalized?

Review Protocol. A review protocol (Fig.1) defines the steps that need to be taken to answer the research questions. In order to achieve reliable results it is important to select appropriate scientific databases for data extraction as well as have a search strategy that describes the requirements for data inclusion and exclusion.
Two main scientific databases were used for the study: Scopus and Web of Science - Clarivate Analytics (VoS). We performed a 2-cycle search in both databases using a review protocol. In the 1st cycle we looked for articles on sustainability issues that were related to the military at large. In the 2nd cycle, we focused only on those articles that were directly linked to the institutionalization of sustainability. The time frame was from 1978 to 2018 (41 years), but the first paper where the management perspective was introduced dates back to 2004 (Hoskin 2004).

Data inclusion and exclusion. Data collection in the 1st cycle was performed using a combination of keywords military or army and synonyms of the word sustainability. Thesaurus dictionaries such as www.collinsdictionary.com, www.powerthesaurus.org and www.thesaurus.com revealed the existence of synonyms of the word sustainability, namely – durability, renewability, coherence, coherency, cohesion, cohesiveness and endurance. We used the beginnings of the word sustainability and its synonyms in our search accordingly: sustain*, durab*, renewab*, social cohe*. Additionally, we excluded three most recurrent irrelevant keywords as species, clinic and habitat. 1,677 papers were found in total (in VoS N909 and in Scopus N768). The total number of papers decreased to 1,056 after deleting duplicates and reviewing them manually (Table 1). In order to concentrate on institutionalization of sustainability, we filtered all search results and focused on the field of management (as a search keyword) during the 2nd cycle of data extraction. As a result, the total number of papers decreased to 228 (Table 1). This extraction strategy allowed us to focus on general trends during the first stage and emphasise sustainability in the military management during the next stage.

To further analyse the data, the search results of Scopus and VoS were combined using CRExplorer. Bibliographical data analysis was performed using HistCite Software LLC and VosViewer 2018 was used for content analysis. In both cases we employed network analysis where authors of the publications and keywords symbolized as nodes. Each link between the nodes was weighed as they represented the number of co-occurrences in different articles. Statistical as well as visual analysis is provided below. Data cleaning for content analysis was performed using a thesaurus file. Thesaurus file was based on JEL Classification System 2016 and IEEE Thesaurus Version 1.0 2017.
Table 1. Search Results for Selected Keywords

<table>
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<th></th>
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<th>Total (after deleting duplicates)</th>
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<tr>
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3. General trends in the field

To illustrate general trends and the increasing interest in sustainability in the military we produced a graph showing the numbers of publications by year. Although the number of publications is constantly growing, the dynamics are fluctuating (fig.2). The period of 2003-2009 is marked by a constant growth of the research in the field. Taking into consideration all publications in the field, the first significant increase in the number of publications was seen in 2009 when the number of publications doubled. It was influenced by three main publications that have a high global index and are written by the same authors (Banks and Stytz 2003). Further analysis of the trends highlights the year 2012 where publications in the field of human resource management had the highest global ranking (Bedwell et al. 2012). Looking at the numbers of publications by year, it is evident that the interest in the field has increased dramatically over the last few years: the highest number was reached in the period of 2015-2017, when the annual number of publications exceeded 100 papers. The publications in the discipline of management remain on a more constant level with a more remarkable increase in 2014 when Green Defence Framework (2014) as a policy paper of NATO was published (Fig. 2).

![Fig. 2. Publishing Trends in the Field of Sustainability Issues in the Field of Military Studies in General and in the Discipline of Management (up to June, 2018)](image)

The authors of publications represent 86 countries and demonstrate a cross-national interest in the topic. It is also worth mentioning that authors from English-speaking countries predominate and their publications amount to more than 70% of all publications (Tab. 2).
Table 2. Affiliation Statistics

<table>
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<tr>
<th>Country</th>
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</table>

To measure the growing interest in the field, we also analysed the trends in citation scoring of the respective publications. The period of 2007-2012 was notable for high-ranked publications (Fig. 3). While analysing publications in the discipline of management, the year 2012 was noteworthy.

Fig. 3. Trends in Total Global Citation Scoring of the Publications

As the field of sustainability is an interdisciplinary one, there is no dominating publisher for the papers we analysed. The journal *Armed Forces & Society* has 18 publications on sustainability issues, and thereby it is the main publisher in the field with the highest citation score (Tab. 3). Publishers of publications on management are interdisciplinary scientific journals.

Table 3. Top 3 Publishers in the Field

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</tr>
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<td>3</td>
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<table>
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<tr>
<th>B. In a subject area of management</th>
<th>Journal</th>
<th>Records</th>
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<tr>
<td>2</td>
<td>Presence-Teleoperators and Virtual Environments</td>
<td>3</td>
<td>13</td>
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<tr>
<td>3</td>
<td>Journal of Security and Sustainability Issues</td>
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4. Citation network analysis and leading theories in the field

To further analyse the genesis of knowledge on sustainability in the military, we employed the historiographical compilation and identified the most influential scientist in the field. At the same time the citation network using historiographs allowed us to answer one of the most challenging questions - if sustainability in the military can be considered as a comprehensive field of knowledge.

We selected 15 most cited papers and created a historiograph of sustainability in the military research literature (Fig. 4). The historiograph represents the total number of publications per year and interlinkages of most cited papers. 11 papers were merged into one cluster which means that articles starting with the publication by Oliver et al. (1999) and ending with the one by McLauchlin (2015) formed a solid body of knowledge. Four publications were left out from this core cluster; by analysing in depth they were leading in separate thematic areas (Fig. 5).

![Fig. 4. A Historiograph of Leading Publications on Sustainability in the Military](image)

1 ID numbers detailed in Table 4
Table 4. Leading Publications in the Field by Global Citation Score

<table>
<thead>
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<th>ID</th>
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Fig. 5. Historiographical Clustering of all Publications on Sustainability in the Military

Historiographical clustering revealed three groups of publications in the area of sustainable development (Fig.5). The largest cluster, which is highly homogeneous in terms of the scope, consists of publications dealing with social sustainability that focuses on social cohesion. The other two clusters are smaller and more evaporated: environmental issues are analysed from the perspective of life sciences while economic sustainability in the military is largely covered by research in political economy.

ID numbers detailed in Table 4
It is worth noting that only a small cluster of publications represents a “classical” approach to sustainability and directly addresses the environmental impact of military activities. The two leading publications in this cluster are led by the same authors - Sabatini et al. (2012a) (2012b) (Fig. 5 No 496 and No 511). They provide actual and environmentally conscious solutions as to how to reduce the impact of chemicals used in the military lights (pyrotechnics). The majority of publications in this cluster focus on issues related to environmental pollution as the military is the biggest producer of greenhouse gas emissions. Based on the study by Bildirici (2018), up to 51% of CO2 emissions is explained by militarization in some largest countries. Accordingly, authors propose engineering and management solutions that would optimize energy management systems and reduce fuel consumption (Anglani et al. 2017). A range of research programmes is initiated to evaluate field conditions and technologies that may reduce contamination of soils and contribute to sustainable land use (Wang et al. 2013; Fayiga and Saha 2016; Jugnia et al. 2018).

Sustainability in the military context is not only an issue, but also a strong stimulus for initiatives that foster efficiency. Military bases are perceived as small cities where sustainable planning approach is crucial (Hubbard et al. 2017) and a variety of managerial measures should be applied. Environmental management systems (EMS), life-cycle assessment (LCA), key performance indicators (KPIs), behavioral patterns of energy consumption, and other methods and tools are validated on the military bases and during their activities (Oglanis, A., Loizidou M. 2017; Tvaronaviciene et al. 2018). Researchers (Procter et al. 2016; Allen and Deal 2017) investigated sustainability strategies and simulated urban metabolism by incorporating multiple areas related to sustainability issues in the military such as energy, water, and waste. Rao (2005) and other scientists employed the paradigm of environmental management and provided solutions for integrating sustainability issues into military missions. Wu et al. (2010) analysed how ISO 14001 Environmental Management System operates with respect to military activities and outlined a legislative framework and environmental policies that included measures for risk reduction, environmental awareness training as well as other management solutions. The number of publications, including their interdisciplinary nature, has increased over the recent years after the NATO’s Green Defence Framework (2014) was adopted. They reflect the requirements of the framework and provide solutions for using less resources and enhancing sustainability. To conclude, the publications in the cluster transfer knowledge form fundamental research to military practice.

Economic pillar of sustainability in the military research was led by Jorgenson and Clark (2009) (Fig. 5, No 344) who employed multiple theories within a political economy framework to analyse the interconnection between military expenditures and ecological footprint of nations. These authors continued their investigation for more than five years and concluded that even though military spending remains substantive, the complexity of military-industrial interrelationship has diminished, i.e. military’s positive impact on the economic development has decreased substantially (Jorgenson and Clark 2016). In contrary, hi-tech weaponry is turning the military into a capital- and knowledge-intensive industry. Contemporary military is no longer an employer for the uneducated and unskilled youth, thus causing significant concerns for those individuals and the society at large (Kentor et al. 2012). In addition, military expenditure exacerbates income inequality and increases the unemployment rate in low and middle income countries (Tang et al. 2009). Recent research provides evidence on unsustainable social impact of military expenditures: hi-tech military expenditures have “a significant negative impact on the short- and long-term health outcomes of children and adults, in both developed and less-developed countries” (Kentor and Jorgenson 2017) which must be considered in terms of sustainable development.

The analysis of military redeployment for the missions abroad also showed negative economic consequences caused by unsustainable urban development. Kim (2017) analysed the third biggest US military base overseas and concluded that military base departures from South Korea produced a long-lasting negative effect as most sites remained empty and heavily contaminated, plagued by redevelopment issues. Base closures are perceived as “local economic shocks that can potentially devastate local economies, particularly in communities with a high concentration of military activity” (Lee 2016).

The social aspect of sustainability in the military research (the largest cluster) is dominated by health researchers, psychologist and sociologists. Researchers analyse how military operations affect human physical and
mental health and what the cost of the traumatic war experience is for the military and the society at large. The dominant topic of research is social cohesion. The publication by Oliver et al. (1999) was the first in the field of medicine that investigated group cohesion in military units. Brailey et al. (2007) and Siebold (2007) followed this with their own publication where they empirically validated the effect of unit cohesion on human health. As for military psychologists, they confirmed the effect of cohesion on individual and group combat readiness (Griffith 2002) and motivation in combat (MacCoun et al. 2006). Research in psychology and medicine connect for more in-depth results. Results showed that social cohesion makes a crucial impact not only on human health, but also on human life: as it was confirmed in the study by Mitchell et al. (2012), combat exposure is a significant risk factor for suicide-related ideas, while unit cohesion provides significant protection against this, thus policy recommendations were provided that stressed institutional measures to strengthen unit cohesion. Social values of sustainability represent people-oriented approach and lead research on human health and capability (Smaliukienë et al. 2011; Kaikkonen and Laukkala 2016) as well as on group cohesion and resilience of social structures (Charbonneau and Wood 2018).

Research on social sustainability in the military takes a unique paradigm and concentrates more on internal processes. In this way, social sustainability is about identifying and managing an impact on the personnel and on local communities which integrate military families and veterans. Social scientists analyse the same topic and present an innovative point of view on the phenomenon of cohesion that now interests non-military researchers. An interesting idea was presented by MacCoun et al. (2006) who divided cohesion in the military into social and task cohesion. Since then, the dual concept of cohesion has been widely used in research where social cohesion is seen as the strength of interpersonal bonds among unit’s members and task cohesion is defined as a shared commitment to the unit’s mission. It is proved that task-related cohesion is linked to satisfaction with work while social cohesion is inevitably associated with psychological distress and related to health issues (Ahronson and Cameron 2007). Research reveals that social cohesion and task cohesion in the military are two separate phenomena. This idea is transferred to non-military research and, as pointed out by Kirton and Maclaren (2018), the link between the performance in sustainable development and task cohesion as well as social cohesion is widely supported by literature.

Social sustainability in the military context is mainly perceived and analysed as a phenomenon of cohesion which, in turn, is understood as a positive incentive. Still, when the paradigm and methodology of other sciences are used, other insights are obtained. For instance, McLauchlin (2014; 2015) analysed cohesion of armed groups and concluded that it depends not only on positive incentives, but also on control. His study is a great example of how expanding the scope of the research presents new insights. However, this interdisciplinary approach does not fall into the middle of the research cluster and remains at its edge (see 677 and 787 in Fig. 4).

The citation network analysis revealed that research on sustainability in the military is mainly carried out in the disciplines of medicine, psychology and sociology. This human-centric approach towards sustainability is disconnected with other disciplines. Meanwhile, environment- and economic-centred research papers create only small clusters in a large body of knowledge on sustainability in the military.

5. Thematic network analysis

We used keyword analysis to deliver the thematic network which provided a comprehensive understanding of how research areas are connected and how they change over time. Our findings using this analysis supported the results from the citation network analysis: keywords organized themselves into three clusters; however, the structure and size of the clusters were different. The biggest cluster (fig. 6) tackles sustainability directly and is connected with keywords used in political sciences: war, security, politics, terrorism, democracy, etc. Keyword sustainability has high value measured by time of occurrence whereas keywords as conflict and war have high centrality values and are connected to form one large network. The cluster is enhanced with cross-disciplinary perspective in a rather surprising way: keywords human resource management and personnel training appear to be connected with politics and identity or democracy and conflict instead of organization and management.
The second cluster (fig. 6) has no clearly explicit centre; nevertheless, it integrates the keywords from a wide range of disciplines: social sciences (keywords: organization and management, strategies) are interconnected with engineering (keywords: software engineering, energy) using cross-disciplinary keywords such as model, system, integration. The cluster represents thematic interconnections among articles on environmental sustainability where energy (renewable energy) is a new flagship. This cluster is explained by the changing nature of warfare and technological advancements of the military where dependency on energy plays a vital role.

The third cluster (fig. 6) is dominated by military organization and gravitates around cohesion. As we already discussed when presenting the citation network analysis, cohesion represents social and human aspect of sustainability in the military research. Accordingly, the cluster consists of health related keywords such as mental health, stress as well as the ones related to social transactions – social support, leadership. Military in terms of sustainable development is seen not only as an actor in a macro-environment, but also as a stand-alone microsystem where internal processes need coherent approach.

Thematic network analysis disclosed the fields where sustainability in the military is institutionalized and management processes and procedures are proposed or established. As for the management discipline, the network presented an unexpected distribution of keywords. It can be seen that the keywords used in this discipline are scattered and non-related. For example, human resource management is in the cluster dominated by keywords of political sciences, and leadership is closer to the keywords of health sciences than to organization and management. Therefore, it can be concluded that when dealing with sustainability issues in the military management is used as a support methodology and not as a separate discipline. At the same time an intersection of the keywords of the management discipline discloses that sustainability is already institutionalized in the military organizations.

Through the comparative analysis of the network built over time we were able to detect some interesting patterns. Taking into account that the topic of sustainability issue in the military research has been evolving...
only since 2009, there are three emerging research areas worth mentioning. These areas are marked with the keywords from all three clusters. Health, management, renewable energy and militarization are the main keywords indicating new or emerging topics in the field (fig. 7). The newest trends indicate that sustainability is becoming a central concept while ancillary terms such as cohesion are disappearing from the research field. The publication by Hardcastle et al. (2015, 2015) illustrated this new pattern. The authors analysed medical treatment facilities in terms of safety and energy sustainability requirements. Similar evidence comes from the field of social sciences where the dominating keyword militarization is directly (usually in the negative or diverse context) linked to sustainability. As illustrated by Marzec (2015), Dunlap (2016, 2016) or Jorgenson and Clark (2016), military as an institution is important when considering any nation’s sustainability and especially environmental issues. Authors using militarization and sustainability as keywords in their articles offer a comprehensive analysis of social drivers of sustainable development and at the same time give clear evidence that the topic of sustainability is becoming an interdisciplinary one. The centrality of sustainability as a node and its direct linkages with the newest keywords identify the interconnection of the topics in the field as well as indicate that in the future the body of knowledge on sustainability in the military may become more coherent.

6. Conclusions

This study identifies a notable development of literature on sustainability issues in the military and displays an imbalanced structure of different research approaches. Human-centric approach towards sustainability is dominating compared to environmental and economic aspects. However, recent publications mark a new trend where all three aspects of sustainability are being integrated.

Our findings show that sustainability in the military is becoming an important paradigm in which a common body of knowledge as well as institutionalized practices are being developed. There are three dominating research streams in the field: (1) social cohesion, (2) environmentally sustainable solutions and (3) economic (un)sustainability of militarization. The first field is mainly represented by research in the field of health and social

Fig. 7. Keywords Clustered by Co-occurrence Over Time Periods: Network Centered Around Keyword ‘Sustainability’
Social sustainability in the military context is perceived and analysed as a phenomenon of cohesion. Social cohesion is proved to be a strong ‘remedy’ for physical and mental health for intra-organizational communities. The topic takes a unique paradigm and concentrates on internal processes, at the same time it provides an innovative point of view on the phenomenon of cohesion that now has been fully analysed by non-military researchers. The research shows that social cohesion is most fully developed topic of sustainability in the military, yet it loses its relevance as health issues are becoming directly related to the broad concept of sustainability.

Environmentally sustainable solutions mark the second field of research on sustainability in the military. According to the number of publication, it is the least investigated topic. Nevertheless, research results on environmental sustainability in the military provide solutions for practical application. Military, as a big consumer of energy and a large polluter, demands diverse solutions as to how efficiency in resource consumption should be increased without sacrificing mission effectiveness. Accordingly, environmentally sustainable solutions found in life sciences and engineering are institutionalized into management systems in the military. In this area, a great integrity of science and practice is developing.

The third field of research focuses on economic (un)sustainability of militarization and is dominated by economic policy researchers. The research results provide evidence of the changing role of the military in terms of national economy. As hi-tech weaponry is making the military a capital- and knowledge-intensive industry, it is no longer an employer for the uneducated and unskilled youth, thus causing significant concerns for those individuals and the society at large. The research in the field of economic sustainability indicates that military expenditure exacerbates income inequality and calls for changes in the policy. The predominance of the paradigm of economic policy-making has created an isolated field of research on sustainability in the military. The newest articles in the field, however, already provide solutions that have an interdisciplinary perspective.

A small but significant share of publications indicates institutionalization of sustainability in the military procedures and operations. This is particularly evident in relation to environmental issues. The publications reflect these practices through case studies as well as provide results of environmental management system research. When dealing with sustainability issues in the military, management is used as a support methodology and not as a separate discipline.

To conclude, social sustainability is currently the dominant topic in the field of sustainability in the military. Nevertheless, the situation is changing as the topic of environmental sustainability is getting more and more attention. Environmental sustainability in the military integrates multidisciplinary approach and the isolation between research on environmental, economic and social sustainability is disappearing. We can predict that in the nearest future a comprehensive body of knowledge on sustainability in the military is going to be formed.

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UK-EU RELATIONSHIP AFTER BREXIT: AN EXERCISE IN SCENARIO-BUILDING

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Abstract. In 2010s, the mainstream academic debate slowly but surely shifted towards European Union’s internal crisis and the possibility of its disintegration. United Kingdom applying to exit the Union in 2017 is the most recent and arguably the strongest indicator of such possibility. “Brexit” (as this process was dubbed) provides an interesting testing ground for latent European disintegration theories proposed by some political scientists. As the withdrawal negotiations have just started, one can only raise causal arguments for the future (if..., then); therefore this article employs scenario-building methodology recently established in political science with an aim to develop a set of scenarios of possible UK-EU relationship after Brexit. Four driving forces are cross-combined: (1) U.S. involvement in European security matters and bilateral relations with UK, (2) German leadership of the integrationist projects within the EU, (3) activism of the European Commission and the European Court of Justice, and (4) the stability of current minority cabinet in UK under Prime Minister May. The three scenarios that logically follow are: (1) UK as member of a nascent European security and defence union, (2) UK’s return to the EU, and (3) UK as an independent power in an “anglobal” world. Rarely, however, do any scenarios composed by political scientists ever materialize in full and a mix of all three scenarios is most likely to come to pass over the course of the next five years or so.

Keywords: European Union; United Kingdom; Brexit; scenario building; disintegration


JEL Classifications: F51, F53, F55

1. Introduction

Over the past ten to fifteen years volumes of academic and analytical studies have been published on the topic of European Union enlargement (e.g., Sjursen 2002; Moravcsik & Vachudova 2003; Schimmelfennig & Sedelmeier 2005; Grabbe 2006; Schimmelfennig 2009; Vachudova 2014). And for a good reason; the “Big Bang” Enlargement to the East (2004 through 2007) increased the number of EU members by 12 which probably amounts to a largest instant expansion of an already established international organization ever. In the 2010s, however, the enlargement process slowed down dramatically, and various intra-European and domestic challenges – from the sovereign debt crisis in the Eurozone to an ongoing European migrant crisis to recent democratic backsliding of several CEE (Central and Eastern European) member states – have shifted the public debate towards the possibilities of EU members reinstating national borders, recoining national currencies, or – at least temporarily – abandoning membership rights and obligations altogether (Dinan, Nugent & Patterson 2017; Jones 2015). Arguably the strongest ground for this debate was laid by the 2016 referentum in the United
Kingdom, in which the British people voted to leave the EU. As a result, the UK government invoked Article 50 of the EU Treaty and official exit negotiations started in June 2017. As a first instance of a full-fledged member state actually leaving the Union, British exit – or “Brexit” (as this process was dubbed) – will offer an interesting testing ground for latent European disintegration theories recently proposed by some political scientists (see Webber 2014; Vollaard 2014). Which of the theories can offer the best explanation of this process will depend on the degree to which UK will actually leave the EU institutional setting. As neighbouring countries like Norway, Switzerland, and Turkey have demonstrated, there are other forms of close cooperation and deep integration with the EU that are similar but short of full membership. After all, even as a member UK does not take part in such important integration projects like the Economic and Monetary Union, the Schengen Area, or the Charter of Fundamental Rights, when even some non-EU countries participate in some of them.

The aim of this article is to construct a few possible scenarios of UK-EU relationship 5 years from now (around year 2022-2023) according to the established scenario-building methodology in political science. Although under the provisions of Article 50 of the EU Treaty a member applying to exit the Union has to terminate its membership within two years after the official notification, negotiating and ratifying a withdrawal agreement between the UK and EU-27 is likely to take more time; thus the parties may agree to extend the deadline provided in the Treaty; transition periods (of semi-membership) are also likely to be included in this agreement. Therefore, constructing a set of so-called medium-term (3 to 10 years) scenarios is methodologically better founded than a set of short-term (1 to 3 years) scenarios. Short-term scenarios tend to be more accurate than medium- or long-term ones, but the latter have more analytical value-added.

Political science literature on Brexit has not yet been accumulated in volumes (it almost certainly will be as this process will reach its earliest aftermath which is typical of the field). Nonetheless, several scholars have already put forth certain projections into the future imagining the world after Brexit. For example, Tim Oliver and Michael J. Williams (2016: 565-567) proposed three scenarios (which they called “the Good”, “the Bad” and “the Ugly”) of EU relations with the U.S. after the Brexit referendum; Richard Whitman (2016: 520-524) constructed two scenarios of how the British foreign and security policy would look like in the future depending on whether Britain stays in or leaves the EU (“Brexit” and “Bremain”); as both of these loose scenario-building attempts came as early as May 2016, one of the variables (if not the only one) on which the plot-lines were dependant was the outcome of in/out referendum in UK which was planned for June 2016. Now that the result of this referendum (~52% of voters opted for exit) and the subsequent actions of British government (official notification of withdrawal was handed to European Council on 29 March 2017) are well known, a new set of scenarios needs to be explored. In the two important volumes that came after the referendum (Special Issue of The British Journal of Politics and International Relations and a selection of articles Brexit: Sociological Responses) most of the pieces are addressing the causes of the referendum results; only a few are looking into the future (worth mentioning is Karen E. Smith and Megan Dee’s projection of British position within the UN framework after Brexit; Smith & Dee 2017). Simon Susen (2017: 171-173) comes closest to scenario-building in his article “No Exit from Brexit?”; however, the six scenarios he puts forth (“Straight Hard Brexit”, “Straight Soft Brexit”, “Relegitimized Hard Brexit”, “Relegitimized Soft Brexit”, “Authocratic No Brexit”, and “Legitimized No Brexit”) are not specific enough in terms of enabling conditions under which they are likely to materialize; nor are they in anyway aligned with any theoretical presuppositions. These are exactly the contributions this article is set to make.

2. Scenario-building methodology in political science

Causal inference and theory (re-)construction has always been at the core of political science. To pass for “scientific” in this field, any descriptive and / or explanatory account of any phenomenon has to “adhere to a set of rules of inference on which its validity depends” (King, Keohane, Verba 1994: 9). These rules are what is usually meant by the term “methodology”. By definition, inference can only be drawn from empirical observations of current order of things and the course of past events leading to it. In fact, a method known as “process-tracing” (Bennett 2008; Bennett & George 2005: 205-232; Checkel 2008; Panke 2012) has been almost predominantly used in “small-N” research settings, typical of International Relations and European integration.
studies. According to Peter A. Hall, “process tracing has sometimes been denigrated as a simple injunction to study history, [although] it should be apparent that systematic process analysis [employed by political scientists] is <...> guided more extensively by theory than are most of [investigations] undertaken by historians” (2003: 395). Thus even when political scientists say they are testing theoretical “predictions”, they are actually trying to explain events that have already come to pass.

Even though strategic forecasting and planning has been an integral part of policy-making since the Cold War, only recently have political scientists (re-)turned to future studies with scenario-building methodology at the core of this research programme (Neumann & Øverland 2004; Bernstein et. al. 2007). Today proponents of such methodology consider forward reasoning to be an innovative way of “empirical” research and theory (re) construction, i.e., a path towards advancement of “science”. According to Steve Bernstein et. at., scenario-building “is simply a form of process-tracing <...> in future rather than past time” (2007: 238). The main difference from traditional process tracing is that none of the competing explanants (causal or “driving” variables) are sought to be eliminated in order to arrive at a story closest to the “truth”; simply because the “true” story is yet to unfold.

In the literature on scenario-building, scenarios are defined as “descriptive narratives of plausible alternative projections of a specific part of the future. They are methodically researched and developed in sets of three, four, or more. <...> They are a combination of estimations of what might happen and assumptions about what could happen, but they are not forecasts of what will happen” (Fahey & Randall 1998: 6-7). As any method, scenario-building has certain rules of application to ensure if not replication then at least “reconstruction” of any causal inference by anyone who cares to do so. There are at least five building blocks of any set of well-founded scenarios: identification of the driving forces, specification of so-called predetermined elements, resolution of critical uncertainties, composition of clear scenario plot-lines, and stipulation of the early indicators for each scenario (see Fahey & Randall 1998: 10-12; Marsh 1998: 33-34; Weber 1997: 171-174; Bernstein et. al. 2007: 238-242).

Driving forces usually derive from theory as “independent variables”, but a practical scientist who has carried a thorough background research of a case at hand is always free to include a driving factor or two that are not suggested by the theory. Some proponents of scenario-building tend to differentiate between environmental (structural) and action-based driving forces (Fahey & Randall 1998: 10), and since theory rarely suggests concrete actions by given actors in concrete situations this is what is usually listed by case-students themselves. Predetermined elements are relatively stable – or at least predictable with a relative certainty – parameters for the scope of scenario exercise; demographic tendencies and natural conditions (such as climate and geography) do not change as rapidly as particular social and political phenomena around which the scenarios are developed. Critical uncertainties are at the same time the strength and the weakness of this method as such because they are the most speculative and creative steps of any scenario-building exercise. As Steve Weber (1997: 173) has pointed out, “scenarios place the critical uncertainties out in front, ahead of the plot lines or connecting principles that pull the story together”; resolutions of critical uncertainties allow the story to unfold, yet are chosen rather arbitrarily. Plot-lines are logical stories of how the driving forces behave under predetermined elements and different combinations of critical uncertainties; they may or may not suggest possible end-states of phenomena in question. Finally, early indicators are the measurable attributes of any scenario that allow observers recognize which scenario plot-line is materializing as the time passes. Early indicators, as well as practical scenario implications are aimed primarily at policy-makers but may also be oriented towards the scientific community with regards to validity of the theory in question.

3. Theories of European (dis)integration and the driving forces in Brexit settlement

Already the “darkest days” of the Eurozone crisis (~2010-2014) prompted a serious revision of the main European integration theories by scholars in European studies; for the first time in half a century of the development of this research field they are turning well-established theories inside out in order to derive the causal factors which can facilitate European disintegration (Webber 2014; Vollaard 2014). As Douglas Webber (2014: 342)
has correctly pointed out, “disintegration” can come about as a decline in the range of common public policies implemented at the EU level, a decline in EU membership, or a formal (treaty-based) reduction of powers rendered to supranational non-state actors (European Commission, European Parliament, European Court of Justice, etc.) in EU decision-making. For the purpose of this article, the term “disintegration” is narrowed down to denote termination of membership in the EU or in one of its institutional settings (free trade area, free movement of people, EU capital market, European security and defence policy, cooperation in justice and home affairs, etc.).

The oldest explanation of post-WWII European politics comes from the realist school of International Relations. Realists view relative power calculations and security concerns as the driving factor behind the behaviour of states on the international scene, including creating and maintaining international institutions. The European integration project was started in the context of Cold War bipolarity of the region; the only relative gains and losses that mattered in terms of national security were overall capabilities of NATO and the Warsaw Pact centered around the U.S. and the Soviet Union respectively. As the “founding father” of structural realism insisted back then “once the possibility of war among [European] states dissappears, all of them can more freely run the risk of suffering a relative loss. Enterprises more beneficial to some parties than others can be engaged in. <...> Economic gains can be granted by one state to another in exchange for expected political advantages, including the benefit of strengthening the structure of European cooperation” (Waltz 1979: 71). The continuing presence of U.S. armed forces in Europe and the survival of NATO has been proposed by realists (Mearsheimer 2001) as the main explanation for the continuation of peaceful cooperation among the European states after the Cold War (albeit not closer integration or enlargement). By that logic, degradation of the transatlantic alliance, withdrawal of American military, and loss of recognizable external threat (such as Soviet Union) ought to revive the need for national autonomy and competition among current EU members; unless, of course, a new “pacifying” power centre appears on the European stage.

By contrast, the neoliberal school of IR focuses on absolute (rather than relative) gains, as well as interdependence between states across various issue areas (as opposed to security sector being the only one that matters). International institutions are functional in a sense that they provide information and reduce transaction costs of cooperation, but, as Robert Keohane (1993: 295) concedes, “without a basis either of hegemonic dominance or common interests, international institutions cannot long survive”. Hegemons usually agree to be constrained by such institutions and bear the short-term costs of enforcing rules on potential defectors out of long-term self-interest (Martin 1992: 784). Neoliberals have argued that EU member states have mutually much to benefit from participation in the Single Market in terms of productivity and output, i.e., they share a common interest in maintaining the regulatory EU framework (Garrett & Weingast 1993). Moreover, to ease the tensions emanating from unequal distribution of absolute gains, the big powers – first and foremost Germany – supply the financial cushion without which the little players would hardly survive the market pressure and institutional restrictions. Although somewhat reluctant hegemon (Bulmer & Patterson 2013), Germany has a vested interest in maintaining this leadership position: “in as far as the EU guarantees German firms access to a large European market and protects Germany against <...> diplomatic isolation, its very existence provides Germany with substantial economic and political advantages that have hitherto been regarded as outweighing the cost of Berlin’s net contribution to the EU budget” (Webber 2014: 356). The shared interest of all EU members in common market will hardly ever diminish as long as production is rooted in capitalist system, but the German willingness to foot the bill for economic “laggards” and fiscal “scruffs” is largely contingent on the domestic politics in Germany (Bulmer 2014; Harnisch & Schieder 2006) and the synchronization of Franco-German duo (Schild 2010); in other words, hegemonic vacuum is one of the main factors of potential EU disintegration.

Neofunctionalists view international integration – even more so than neoliberals in IR – view policy process in different issue areas as functionally tied in terms of synergies and externalities. Back in 1950s, the European integration project was initiated in the area of “low politics”, but created functional pressure to integrate ever more policies that have previously been definitive of national sovereignty (Burley & Mattli 1993; Niemann 2008). Unlike most scholars in the field of IR (including both neorealists and neoliberals), neofunctionalists
see this pressure as first addressed by sub- and supra-national actors rather than national governments: “the expansion of transnational exchange [across Europe], and the associated push to substitute supranational for national rules, generates pressure on the [EU]’s organizations to act. Generally, <...> the Commission and the Court respond to this pressure by working to extend the domain of supranational rules, in order to achieve collective transnational gains” (Sandholtz & Stone Sweet 1997: 299). In other words, the integration dynamics – usually encapsulated by the term “functional spillover” – is dependent upon concerted efforts of transnational interest groups and supranational bodies. Scholars of neofunctionalist stripes have tried to employ this theory to explain the geographic expansion of the EU as well (Niemann & Schmitter 2009: 61-63); despite the nominally intergovernmental nature of the enlargement process, gradual integration and upgrading of status of candidates is reportedly advocated by the European Commission and organized business interests within members and candidates alike (MacMillan 2009). In turn, the form EU disintegration and withdrawal from the EU may take will depend on which transnational interests will win the ear of the Commission, and how successful the supranational level will be at defining and defending the “community interest”.

Finally, the theory of two-level intergovernmental bargaining (integral to liberal intergovernmentalist school in European studies) ties international outcomes to the basis of domestic politics and double-win strategies pursued by political leaders. As Andrew Moravcsik (1993b: 483) put it, “the primary interest of governments is to maintain themselves in office; <...> this requires the support of a coalition of domestic voters, parties, interest groups and bureaucracies, whose views are transmitted <...> through domestic institutions and practices of political representation. Through this process emerges the set of national interests or goals that states bring to international negotiations”. The “national interest” that the negotiating parties set to defend, however, is not a fixed value but rather a range of domestically acceptable outcomes that Robert Putnam (1988: 437) has called a “win-set”. Two-level bargaining theorists also assume that governments and national leaders are not mere gatekeepers of domestic interests, but have preferences of their own which they usually try to work into international agreements and sell to their constituents (Putnam 1988: 456-459; Moravcsik 1993a: 30-31). Drawing on these theoretical assumptions, personalities of leaders and negotiators, changes in governing coalitions, and domestic political competition may also become major drivers of EU disintegration.

To sum up, four driving forces are derived from the main theories of European (dis-)integration: (1) U.S. involvement in European security architecture and bilateral relations with the UK, (2) German (or Franco-German) leadership of the integrationist projects within the EU, (3) activism of the European Commission and the European Court of Justice (ECJ) in interpreting the EU “constitutional” setting, and addressing transnational interests, and (4) development of domestic political situation in the UK, including the stability of current minority cabinet under Prime Minister May and the continued support provided by Democratic Unionist Party to the governing conservatives. The critical uncertainties about these driving forces are, of course, rooted in their multi-dimensional nature: e.g., NATO may fall into oblivion under inability to arrive at consensus decisions, but the U.S. may remain strongly involved in Europen affairs through other means; the British conservatives may break ties with Irish unionists, but negotiate the support of other minor parliamentary groups hence saving May’s premiership. In the scenarios listed below only arbitrary solutions to critical uncertainties are provided.

As this scenario-building exercise is limited in time (five years from 2017), such “variables” as trade and investment structure between the UK and other EU countries, the treaty-based “constitutional setting” of the EU as an organization, and the general demographic tendencies across Europe will be treated as predetermined elements. All of them, the former especially, can certainly change (or be changed) over time, but five years is arguably too short a period to radically reorient trade and investment, or witness dramatic shifts in demographics. For the medium to long term future, UK is likely to remain an economy based on services, usually accounting for almost 80% of its GDP (HM Treasury 2016: 31), with 44% of its exports (50% of goods and 37% of services) directed to EU countries; 48% of foreign direct investment (FDI) in UK is of EU origin, whereas only 24% come from the U.S. and 5% from EFTA countries (HM Treasury 2016: 47). Even though UK has one of the fastest growing populations in all of the EU and is expected to decisively outrun both Germany and France by 2050 (the estimates are put over 77 mln. for 2050 and as high as 85 mln. for 2080; Eurostat 2015: 164), in
the next few years it will remain a somewhat medium power on the world stage with a population of 66 to 67 million at best. A possibility that Britain may opt-in to the EU policies that it currently enjoys a legal opt-out from (such as “Area of Freedom, Security and Justice”, allowing it not to participate in the quota-based resettlement of asylum seekers) is a priori discounted.

4. Scenarios of UK-EU relationship after Brexit

**Scenario 1: United Kingdom as part of a nascent European security and defence union**

As a result of growing security concerns in East Asia and Greater Middle East, accommodation with Russia over Ukraine (de facto ceding Crimea in exchange for gradual phasing out of conflict in Donbass), and endless debates over burden-sharing within NATO, the U.S. is slowly shifting its focus towards other regions. The nuclear deterrent is still present in Italy, Germany and the Low Countries, but the U.S. invests less in joint military exercise and is reluctant to provide support to European/EU-led military missions in Africa and elsewhere. European powers under the leadership of France and Germany finally arrive at principal political decision to create a real European security and defence union with major security concerns addressed at the European level (in parallel with or sometimes even prior to North Atlantic Council) and stable funding provided by the EU rather than nations participating ad hoc in the military dimension of CSDP. Debates spur within the EU on the coordination of intelligence units under European External Action Service (EEAS), and possible expansion of tasks listed in Article 43 of TEU (so called “Petersberg tasks”) to be assumed by EU Battlegroups. The main rationale for an autonomous European military capability is a proactive EU role in local conflicts and regime change in Africa and the Middle East in order to counter main European security concerns (terrorism and illegal immigration) at their source.

After initially trying to bring the allies on both sides of the Atlantic back together, UK seizes the opportunity to play one of the leading roles in the creation of European defence alliance and is welcomed by France and Germany which themselves have limited capabilities (even though in this scenario all major European powers set to increase their defence spending dramatically). In exchange for British contribution to an autonomous European security and defence muscle, UK is granted a special relationship with the EU which essentially violates the “constitutional consensus” of indivisibility of the four freedoms. This of course means that the EU supranational actors have already failed to secure the constitutional balance unchanged during the negotiations on post-exit settlement and were upstaged by grandiose plans of the big states. The UK is allowed to trade in goods and services on the Single Market virtually without restrictions, but has a certain “veto” on the free movement of persons, most likely in a form of preferential employment regime according to which local residents (UK and pre-Brexit EU citizens alike) take precedence in filling new vacancies on the job market. Even though UK keeps most of the EU legislation in place and automatically transposes any new pieces passed by the EU into their domestic law so as to maintain access to the internal market, formally they remain outside the European Economic Area; thus any trade disputes between UK and the EU are settled within the framework of “bilateral council” and are kept outside the jurisdiction of the ECJ or EFTA Court. UK contributions to EU budget are significantly smaller (akin to those of Switzerland whose net contribution to EU budget is an annual 0,02% of GDP or 12 EUR per capita, while as a member UK currently pays around 0,25% of GDP / 79 EUR per capita) and London secures a narrow say in EU decision-making during informal meeting of the ministers of newly created European security and defence union. Having stood its ground during Brexit negotiations, May government maintains a substantial degree of popularity and despite internal party battles avoids serious domestic challenge.

**Scenario 2: United Kingdom on the way back to the European Union**

In this scenario European security “architecture” does not change significantly with the U.S. and NATO remaining the main hard security guarantors for the continent. The momentum of European integration is substantially slowed down as Germany (mostly because of increasing anti-European opposition in Busdestag) is reluctant to bear the cost of either military or banking union (for example, an overall ceiling on paid-in capital of European Stability Mechanism is proposed); severe quarrels arise among EU members over sharing asylum
seekers from third countries as Germany and several other member states that had previously pursued an open door policy adopt national limits on asylums granted per annum. The task of promoting European integration and initiating new grandiose projects – from trade deals with major world economies (first of all, the U.S., Japan and Mercosur) to tax harmonization within the Single Market – is almost entirely assumed by the European Commission. Within the mandate bestowed upon it by the Council on 22 May, 2017, the Commission also succeeds in defending “common European interest” and the constitutional basis of the Union vis-à-vis Britain. Having battled to stay in the Single Market by all costs, the UK is now stuck in a quasi-permanent (up to 5 years + possible prolongation) “transitional stage” of unlimited access to the European market for goods and services, as well as capital, but also unlimited immigration of people from EU member states (EU citizens and residents alike). UK is still subject to ECJ rulings and applies common European external customs tariff, yet as of April 2019 does not formally take part in EU decision-making in any form (neither in the Council, nor in the European Parliament).

While the British and the Commission negotiators are working on “post-transitional” agreement (with no end in sight) Theresa May’s popularity crumbles with Labour and libdems slowly growing political capital by criticizing the whole “Brexit scam”, initiated and executed under conservative leadership of the country, which in this scenario actually leaves Britain worse off. The Labour party especially calls for another referendum to re-enter the EU, possibly under similar conditions that were negotiated by Cameron government back in 2015-2016 (i.e., exempting UK from “ever closer” political union). At the same time, the Commission and President of the European Council are sending encouraging signals about the possibility of speedy reentrance on the grounds that UK has not yet fully left the Union. Leaders of the big member states (Germany, France, Italy) are more reserved about such course of events and rather passively appeal to the authority of the ECJ on this matter. Having broken ties with Irish unionists and facing growing opposition within its own party, May calls for another “snap” election in UK with less than five years passed after the official notification of withdrawal.

**Scenario 3: United Kingdom as an independent power and proponent of “anglobal” world**

Leaving the EU actually pushes UK towards strengthening its ties with the U.S. and other English-speaking countries (notably Australia, Canada, New Zealand, India). The idea of “Anglosphere” (see Wellings & Baxendale 2015) is revived and under British diplomatic activism is acquiring a clear economic dimension. In parallel to withdrawal settlement with the EU, London unofficially “negotiates” a free trade deal with the U.S. which potentially consists of several agreements to be put in place and implemented incrementally over a decade or so. The first modest agreements between the UK and U.S. on trade in services and public procurement, reduced customs procedures, etc., are signed within a year or so after the official termination of British EU membership. In the long term, institutions (such as joint U.S.-UK committee on deregulation and standard-setting) are to be established and tariffs discarded altogether. By the end of this scenario span, UK has also started negotiations on analogous free trade deals with Canada and Australia, discussing the possibility of free trade agreements with several other former colonies. Although “Anglosphere” is not formalized in any treaty-based organization (at least not in the foreseeable future), the British government lures countries like Australia, India and even the U.S. into political declarations of common stance on international matters, such as fight against terrorism, nuclear non-proliferation, and free trade. New cultural and academic exchange channels are suggested by the ruling elites in English-speaking countries. At the same time, UK is strengthening its relations with pro-Atlantic NATO members in the EU, CEE nations in particular, so as to maintain American presence on the old continent as strong as possible and counter any alternative European security architecture proposals circled around by the Franco-German core in the EU.

Now that UK is leaving, the EU embarks on several important integrationist steps under the leadership of both major member states and supranational bodies. The European Council arrives at principal political decision on incremental tax harmonisation within the Single Market and the Commission is entrusted with preparing a comprehensive plan on how to do this within a decade or less; steps are taken in europeanizing external border control under FRONTEX and developing a more efficient asylum policy. At least a group of member states (a
minimum of nine according to Article 20 of TEU) starts an ambitious process of coordinating social benefits policies towards non-EU citizens. This scenario falls somewhere between scenarios III and V recently put forth by the EU itself (European Commission 2017: 20-22, 24-26).

UK–EU relationship, in the end, turns out to be somewhat similar to EU relationships with a number of associated countries in Northern Africa, Levant and post-soviet Eastern Europe. As with most associated countries, in this scenario UK gains access to EU market for most of the goods (possibly including agricultural products), capital and some of the services (possibly including financial services) on the condition that it retains (or adopts) around 300 pieces of EU legislation (as did Ukraine upon signing DCFTA). It regains immigration control (probably in a form of work permits), but secures full pre-Brexit rights of EU citizens living in the UK upon official withdrawal date. The trade between the UK and EU, however, suffers badly compared to pre-Brexit volume of trade because of customs check and “country-of-origin” paperwork. UK does not contribute to the EU budget and is not eligible for funding, and all trade disputes between UK and the EU are settled by bilateral association council with exclusive jurisdiction of the ECJ in interpreting the EU legislation (not the association agreement itself). The main difference between this scenario and scenario 1, however, is that the concrete items of trade are decided case-by-case at the political level (in the form of an annex to the association agreement) and therefore subject to European Commission and Council attaching political conditions before any update.

Table 1. Combinations of the driving forces in the scenarios of UK-EU relationship after Brexit

<table>
<thead>
<tr>
<th>SCENARIO</th>
<th>DRIVING FORCES</th>
<th>U.S. presence in Europe</th>
<th>German (+French) leadership in the EU</th>
<th>Supranational bodies (Commission and ECJ)</th>
<th>Political situation in UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>strong</td>
<td>weakened</td>
<td>strong and active</td>
<td>absent or reluctant</td>
</tr>
<tr>
<td>Scenario 1</td>
<td></td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
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<tr>
<td>Scenario 2</td>
<td>×</td>
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<tr>
<td>Scenario 3</td>
<td>×</td>
<td>×</td>
<td></td>
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<td></td>
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</tbody>
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Source: designed by author of the article

Conclusions: evaluation of scenarios

Predicting the future is not the ambition of scenario-building methodology; in fact, hardly any scenario plot-lines composed by political scientists ever materialize in full. As Steve Weber points out, “scenarios are effective if they open people’s minds to possibilities that they did not previously consider, so that their level of surprise on encountering the future is reduced” (1996: 287). Scenarios of the possible UK-EU relationships after Brexit listed above (especially scenarios 1 and 3) do involve some extreme courses of events that were most likely not taken into consideration immediately after the fateful referendum last year. In that sense, the scenarios put forth in this article are already a success in their own right. The theoretical implications of this scenario-building exercise, on the other hand, are limited at best: scenarios neither verify nor disprove any of the theories drawn upon here, but they do show how colossal an effect the various driving forces proposed by these theories have on European integration dynamics, especially in such crisis situations as the one at hand. Thus in theoretical terms, scenario-building can be considered a case for what some political scientists call “theoretical eclecticism” (Katzenstein & Sil 2010).

As the Brexit negotiations have already started and for most part are conducted behind closed doors, one can only project the future UK-EU relationship based on signals and messages that both of the negotiating parties (and external actors for that matter) transmit to the public. If, for example, over the course of year 2018 we see an increasing number of mutual visits and exchange of proposals between the “Anglosphere” countries (UK and U.S. especially) at least parts of scenario 3 are likely to materialize; if, on the contrary, the official Brexit negotiations are paralleled by intensive intergovernmental meetings and declarations of the “big three”
(France, Germany and UK) on security and defence matters, scenario 1 is taking shape (even if plans to create a genuine European defence union eventually fail); yet if by the beginning of year 2019 the official Brexit negotiations result in a “transitional settlement”, scenario 2 proves to be at least partially accurate. A mix of all three scenarios, however, is also very (if not most) likely to come to pass over the course of the next five years. Whichever form Brexit will eventually take, it will not only set precedent for future withdrawals from the EU (if needed), but also the terms of possible reentrance, so “mental experiments” like this one ought to be instrumental in making decisions and setting negotiating positions to both UK and EU.

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PATH TOWARDS NATIONAL SECURITY IN THE EUROPEAN UNION: GENESIS AND FURTHER DEVELOPMENT PROCESSES

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Abstract. The article reviews standards of state policies in terms of the national security of the European Union countries. The authors provide a comprehensive analysis of the theory and practice of providing national security in the EU countries. In addition to that, the article provides for a deep analysis of the major methodological approaches in regards to establishing national security in the EU. The authors make a systematic review of the development and implementation of the EU security doctrines. The aim of this research article is to analyze the development of the idea of developing a European defense policy to find an effective way of incorporating our state into European security structures. Also, the research question may be posed as discussion on the way the national security is guaranteed in the EU countries and what may the ways of its development. The novelty of the study is in the way how the past, current and future national security setup is implemented in the EU countries and what may the ways of its development. Materials and methods used in studying this problem, researches and publications of such domestic and foreign researchers were used. At the same time, processes of global and European security need constant analysis and study. The results showed that the problem of the formation of the European security and defense system that emerged shortly after the end of the Second World War prompted European countries to work more closely together, particularly in the defense sector. After the Cold War and the emergence of new challenges for stability on the continent, the EU has embarked on a path towards greater consolidation and greater awareness of own defense and security interests. Conclusion of the article is that an analysis of the approaches to the national security in the EU convincingly demonstrates that the level of security depends on many factors. The successful provision of national security strategy and approach depends on the sustainability and strength of their national economies. Only a strong economy allows successfully defending national interests in growing global competition and world economic disparities. Therefore, a country shall not only develop a national security concept, relying on world experience, but, above all, to reform its domestic and foreign policies with a view to protecting all actors.

Keywords: administrative support; legal support; national security; threat, European Union

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JEL Classifications: K1, K19

1. Introduction

The situation in the world and its main regions is formed under the influence of an exceptionally complex and dynamic process, which is based on the globalization of the world economy and the related revision of the whole system of international relations. In view of the continued desire of individual countries, peoples, political, religious and other groups, as well as individuals, to achieve their goals by any means, it has been further expanded, supplemented by new, previously considered potential threats (Fabuš 2017; Kordík, Kurilovská
Recently, there are relatively new sources of external threats in the form of international terrorism and organized crime, drug trafficking, smuggling of weapons and military equipment, the danger of environmental disasters that require adequate responses (Šišulák 2017; Petrenko et al. 2017; Todorov et al. 2018; Njaramba et al. 2018; Lietuvnikė et al. 2018; Zahars, Stivrenieks 2018; Matvejevs 2018). The potential for conflict is growing due to the widening gap between rich and poor countries, political and religious extremism, aggressive nationalism, separatism and territorial claims, increased religious intolerance and xenophobia, high levels of terrorist activity and transnational organized crime, proliferation of weapons of mass destruction and uncontrolled proliferation materials and technologies that can be used to produce such weapons. There is a clear tendency to increase the vulnerability of all members of the international community in the face of a variety of challenges and threats, the range and severity of which are evolving, mutating and acquiring a transboundary character. As Wark (2005) wrote, “The threat of security is […] security itself”. In his work “Theory of World Security”, K. Booth (2007) puts forward the idea of creating a world security system that transcends national boundaries and rejects the “instinctive animal struggle for survival”: “The idea of world security is synonymous with freedom of individuals and groups that is compatible with the rational freedom of others, and universal moral equality compatible with justified pragmatic inequalities”. World security will have to be based on a cosmopolitan democracy, which, in Booth’s (2007) view, “can never be achieved through wars and revolutions, because such a new world order does not allow such means”. Thus, the article aims to analyze the development of the idea of developing a European defense policy in terms of the attempt of the European Union to move towards greater consolidation and greater awareness of the power of interests in the areas of defense policy and security.

2. Materials and method

In the field of studying European security, critical security studies are conducted. The term of “critical (or non-traditional) studies” refers to a particular area in the field of security research, which differs from the traditional realistic approach in which the central role in ensuring security is assigned to the state. Critical studies focuses on economic, environmental and social security. The main thinkers of critical research are the Welsh, Copenhagen and Paris schools. Each of these schools has its own special approaches to the conceptualization of security.

The Welsh School is developing within the so-called Emancipatory theory. This current takes its origins in the Frankfurt School, whose prominent representatives are T. Adorno, J. Habermas (Singh, 2017). This theory was first put forward by K. Booth in the early 1990s. They advocate a universal security system in which the individual, not the states and nations, plays a central role. The second trend in non-traditional doctrines is the securitization theory, which is developing within the framework of the Copenhagen school. It includes such scientists as B. Buzan, O. Waever and J. Wilde. The theory is based on the idea that in international relations something becomes an object of urgent policy not because it represents a danger, but because an influential actor proclaims it as a serious threat. But securitization exists not only simply due to its popularization by the actor, but only after the audience perceives it. By accepting and legitimizing society, the actor can take extraordinary measures and “legitimize the breaking of rules” (Buzan, Waever, & Wilde, 1998). The third direction of critical research is the “insecuritization theory” (Balzacq, 2010), developed by the specialists of the Paris School – M. Foucault and P. Bourdieu. Supporters of the theory (in particular D. Bigo) argue that “security” is what is done to it, that is, how safety is practiced. In this theory, security is not understood as an “anthropological necessity” (Burgess, 2010)(as in the emancipation theory) or as an act of public speaking (as in securitization theory) but rather perceived as a process of “securitization or insecure of borders, identities and notions of order” (Bigo, 2000). As Bigo writes: “Security — in any case not a reflection of the increasing threats in the modern era — it is the decrease in the level of acceptability of the other; it is an attempt at insecurities the everyday lives of professionals and the strengthening of political potential for action” (Bigo, The Mobius Ribbon of Internal and External Security(ies), 2001). Paris school theorists question the understanding of the security of the Copenhagen school, arguing that securitization is not the result of a successful public act, but everyday bureaucratic decisions, the use of technology and the Weberian practice of rationalization (Ritzer, 2017).
Among the studies, one can also mention the work of J. Coelmont, a member of the Belgian Royal Institute of International Affairs and the European Military Committee, entitled “A European Global Security Strategy: Offering Seven-League Boots to Become a Global Actor”.

3. Discussion

Institutional mechanism of joint policy and security policy in the EU

The institutional mechanism of the European Union’s CFSP, which has evolved and improved over a long period of time, has been shaped quite clearly today. Functions in the field of the CFSP are assigned, to a greater or lesser extent, as the main institutions of the EU, and a whole system of special bodies for the implementation of the relevant policy of the European Union has been created. The Article 24 of the EU Treaty stipulates that the rules and procedures of the common foreign and security policy of the EU are defined and implemented by the European Council and the Council of the EU, which adopt resolutions unanimously, unless otherwise provided by the Treaties. The European Council, incorporated by the Lisbon treaties into the system of the main institutions of the European Union, according to Art. 26 of the Treaty on the European Union, reveals the strategic interests of the Union, sets goals and defines the general directions of the common foreign and security policy, including those with defense implications. And for this purpose, she makes the necessary decisions. The decisions of the European Council on the strategic interests and objectives of the Union concern the CFSP and other areas of Union foreign policy. At the same time, such decisions may concern the Union’s relations with a particular country or region or provide a thematic approach. They define the term and means to be provided by the Union and the Member States. The European Council acts unanimously on the recommendation of the EU Council, adopted in accordance with the conditions for each sphere (Article 22 of the Treaty on the European Union). If the intergovernmental situation so requires, the President of the European Council convenes its extraordinary meeting to determine the strategic directions of the Union’s policy in the light of such development. States consult each other within the framework of the European Council and the Council of the EU on any matter of foreign policy and security policy of mutual interest with a view to defining a common approach. That is, before carrying out any action on the international scene or assuming any obligation that could affect the interests of the Union; each Member State should consult other Member States within the framework of the European Council or the Council of the EU (Article 32 of the Treaty on the European Union). That is, it is not about the right but about the obligation to conduct such consultations. And it is precisely, as stated in this article of the Treaty, that, by converging their actions, Member States provide the Union with the ability to defend its interests and values in the international arena, while demonstrating mutual solidarity. The President of the European Council also plays a role in the European Union’s CFSP. In particular, according to Part 6 of Article 15 of the Treaty on European Union, the President of the European Council, at his own level and in his status, represents the Union in the external affairs of the CFSP, without prejudice to the powers of the High Representative for Foreign Affairs and Security Policy. The Council of the European Union (composed of the Ministers of Foreign Affairs of the Member States), together with the European Council, defines and implements the EU’s activities in the field of CFSP. Hence, according to part 3 of the Article 26 of the Treaty on the EU, the EU Council is developing a common foreign and security policy and adopts the decisions necessary for its definition and implementation on the basis of general directions and strategic decisions established by the European Council.

Thus, when the international situation requires operational action by the Union, the Council of the EU makes appropriate decisions. They define their goals, limits, means, which must be made available to the Union, and, if necessary, their duration and conditions of implementation. The Council adopts its decisions defining the position of the Union on specific issues of a geographical or thematic nature, and Member States, in turn, should ensure the consistency of their national policies with the positions of the Union (Articles 28 and 29 of the Treaty on the European Union). (On the special feature of legal acts in the field of CFSP, in particular those adopted by the European Council and the EU Council, see below). In turn, Article 30 of the Treaty on EU stipulates that, for the consideration of the Council of the EU, any questions, initiatives or proposals relating to the CFSP, such as each Member State, and the High Representative of the Union for Foreign Affairs and Security Policy, both on their own and on support from the EU Commission. In this case, in cases requiring a
speedy solution, the High Representative, on his own initiative or at the request of a Member State, convenes an extraordinary meeting of the Council for 48 hours, or in case of absolute necessity, within a shorter period of time. And in important cases, on the proposal of the High Representative of the Union for Foreign Affairs and Security Policy, the EU Council may appoint a special representative, which she gives a mandate in relation to certain political issues (Article 33 of the Treaty on the European Union). In addition, the Council of the EU can conclude international CFSP agreements with other states or international organizations in accordance with the general rules for concluding such agreements in the field of external relations of the EU. The Council of the EU should also decide on the establishment of rules for the protection of individuals with regard to the processing of personal data by Member States when carrying out their activities in the field of the CFSP (Article 39 of the Treaty on the European Union).

The Treaty of Amsterdam introduced the post of High Representative of the Union for Foreign Affairs and Security Policy, which was performed by the Secretary General of the Council of the EU, and was given wider powers after the entry into force of the Lisbon treaties. For the first time, the post of High Representative in 1999 was occupied by J. Solana, who, thanks to his personal qualities and experience at the post of NATO leader (which respectively affected the intensification of the military component of the EU), was able to give the CFSP a special status commensurate with the other pillars of the European Union. According to Article 18 of the Treaty on the European Union, the High Representative of the Union for Foreign Affairs and Security Policy shall be appointed by the European Council, acting by a qualified majority, in agreement with the Chairman of the Commission. High Representative directly implements the foreign policy and security policy of the Union and contributes to the development of this policy, which he carries out as an authorized representative of the Council. He applies the same actions to a common security and defense policy. The High Representative chairs the EU Council on Foreign Relations and is one of the Vice-Chairmen of the Commission. It ensures the continuity of the Union’s foreign policy. In the framework of the Commission, he is responsible for the duties that are common to this body in the field of external relations, and for coordination of other aspects of foreign policy of the Union (parts 3 and 4 of Article 18 of the Treaty on the European Union). Under the draft Treaty establishing a Constitution for Europe, the High Representative was to be called the EU Minister for Foreign Affairs, who emphasized the great ambitions of the authors of this draft treaty. The European External Action Service is assisted by the High Representative for Foreign Affairs and Security Policy in the exercise of his powers. According to Part 3 of Article 27 of the Treaty, this service cooperates with the diplomatic authorities of the Member States and includes officials of the competent services of the General Secretariat of the Council and the Commission, as well as staffed by the diplomatic authorities of the Member States. The organization and functioning of the European Foreign Policy Service was established by the EU Council Decision in May 2010 (EU Council Decision 2010/427). In this document, in particular Article 2 outlined the main tasks of the European External Action Service: support to the High Representative of the Union for Foreign Affairs and Security Policy in the implementation of his mandate in the field of CFSP and SABO, in his activities as Chairman of the EU Council on Foreign Affairs, as well as in his activities as deputy Chairman of the Commission. In addition, the European External Action Service should assist the President of the European Commission and the Commission as a whole, as well as European Parliament in the exercise of their functions in the field of external relations. Certain competences in the CFSP area are also endowed by the EU Commission and the European Parliament. Regarding the EU Commission, on the one hand, if one takes into account the provisions of a separate section of the EU Treaty on the CFSP, on the one hand, it is not mentioned very often, mainly with regard to the activities of the High Representative of the Union for Foreign Affairs and Security Policy, who at the same time is the vice chairman Commission, but, on the other hand, the Commission has more powers in the field of foreign policy through the prism of the provisions of the Treaty on the Functioning of the EU (negotiations on the conclusion of international treaties, representation of the EU in intergovernmental organizations, etc.).

In particular, in the context of the provisions relating to the CFSP, with the support of the Commission, the High Representative for Foreign Affairs and Security Policy of the Union and each Member State may submit to the Council of the EU any question pertaining to the CFSP and may transmit it to its consideration, respectively, of initiatives and proposals. In a way, the CFSP activities of the Commission relate to the implementation of the budget of the European Union in this area. According to the provisions of the EU Treaty, the competence
of the European Parliament is also very limited in the CFSP. It is noted that the High Representative for Foreign Affairs and Security Policy regularly consults with the European Parliament on the main aspects and basic priorities of the CFSP and the WSIS and also informs of the ways in which these policies are being developed. The High Representative will ensure that the European Parliament’s opinion is properly taken into account and that its special representatives may be involved in informing the European Parliament (Article 36 of the Treaty on the European Union). The same article states that the European Parliament can ask questions or make recommendations to the Council and High Representative. Twice a year in the European Parliament, discussions should be organized on the progress made in the implementation of the common foreign and security policy, including the common security and defense policy. The European Parliament also has a certain impact on the CFSP through the control of the EU budget (since part of the expenditure on the CFSP is financed from the EU budget). The Lisbon treaties have largely limited the jurisdiction of the European Union Court in the field of CFSP, in comparison with other areas of EU competence. According to Article 24 of the Treaty on the European Union, the Court has no jurisdiction over the provisions relating to the CFSP, with the exception of jurisdiction over compliance with Article 40 of this Treaty and control over the legality of certain decisions provided for in the second paragraph of Article 275 of the Treaty on the Functioning of the EU. In the first case, it is a matter of the fact that the implementation of the common foreign and security policy of the EU cannot influence the application of procedures and limits of authority of institutions in other areas of EU competence, in particular, provided for in relevant articles 3-6 of the Treaty on the Functioning of the EU, and, conversely, the implementation of these policies does not affect the application of the procedures and respective powers of the institutions established for the exercise of the powers of the Union in the field of the CFSP (Article 40 of the Treaty on the European Union). With regard to the second case, the extension of the jurisdiction of the EU Court to the CFSP, then it has jurisdiction to take decisions on claims of individuals and legal entities, on the acts to which they are addressed or which are directly and directly related to them, and also with regard to acts which directly affect them, do not require implementation measures or which impose any restrictive measures against them (Articles 263, 275 of the Treaty on the European Union). In addition to these provisions of the Treaties, which clearly provide for the extension of the competence of the EU Court to the CFSP, it can also be argued that, according to Part 11 of Article 218 of the Treaty on the Functioning of the European Union relating to the conclusion of international agreements, a Member State, the European Parliament, the Council or the Commission may obtain a conclusion from the Court as to the conformity of the proposed agreement with the Treaties, in particular if this international agreement regulates matters relating to the CFSP. And in the case of a negative judgment of the Court, this agreement may only come into force when it is amended, or a revision of the contracts will be made. In the institutional framework of the CFSP, in addition to those mentioned above, there is still a number of special bodies that are set up to better achieve the goals and objectives of the European Union in this area.

The Committee on Political and Security Affairs, as a body in the field of the CFSP, under such a name, was included in the Treaty on European Union by the Treaty of Nice (formerly the Political Committee). It operates on the basis of Article 38 of the Treaty on the EU and Council Decision 2001/78 as of 22 January 2001. Functions and tasks of this body are very important. It is worth mentioning that the Committee of Permanent Representatives - COREPER, which consists of the ambassadors of the EU member states (COREPER II) and their deputies to the EU (COREPER I), plays a significant role in organizing the work of the Council of the EU. It is during the meetings of both committees that the Council of the EU prepares meetings, reaches agreement on the majority of normative acts, which are subsequently adopted by the Council, and coordinates the activities of numerous expert groups. It was these functions in the CFSP and was carried out by the Political Committee, which formally was an independent body. Similarly, the situation today is regulated by the Lisbon treaties. According to Article 38 of the Treaty on the European Union, the Committee on Policy and Security, without violating the requirements of Article 240 of the Treaty on the Functioning of the European Union (on the activities of a separate Committee of Permanent Representatives of the Governments of the Member States), monitors the international situation in the fields related to the CFSP, and contributes to the definition of policy through the preparation of conclusions for the Council at its request, at the request of the High Representative The Union for Foreign Affairs and Security Policy or on its own initiative. The Committee also monitors the process of implementing a coherent policy, while not reducing the authority of the High Representative.
It is important that, within the framework of the CFSP, the Committee on Political and Security Affairs under the responsibility of the Council of the EU and the High Representative carries out political control and strategic management of the crisis management operations mentioned, in particular, Article 49 of this Treaty says that the Committee, in close and constant contact with the High Representative of the Union for Foreign Affairs and Security Policy under the leadership of the Council, ensures the coordination of civilian and military aspects of these missions (the so-called “Petersberg Missions”). In fact, with the aim and for the duration of such crisis management operations, the Council of the EU may authorize the Committee to take appropriate decisions regarding political control over the operation and its strategic direction. Meetings within the Committee are held at the level of high-level officials of the EU member states in the rank of ambassadors, mainly twice a week. The Committee established three subsidiary bodies: the Political and Military Groups, the Committee on Civil Aspects of Crisis Management, and the so-called “Nicolades Group”, which prepares the Committee’s meetings. The Strategic Planning and Early Warning Unit was created on the basis of the Declaration of the Sixth Amsterdam Treaty within the framework of the apparatus and led by the High Representative of the Union for Foreign Affairs and Security Policy, in particular, to coordinate the work of other Union institutions in shaping foreign policy. Its competence includes the creation of a network for obtaining and processing information from all EU structures and conducting an independent policy planning of possible strategic EU actions in the field of CFSP. Within the framework of the Committee on Political and Security Affairs, a Committee of European Correspondents, which includes designated staff of the Ministries of Foreign Affairs of the EU Member States, is responsible for the exchange of information between the Member States, the General Secretariat of the Council of the EU, the Commission and the diplomatic representations of the Member States.


A number of auxiliary agencies have also been set up within the framework of the CFSP, which, in the main, contribute to the goals and objectives of the common security and defense policy. The Agency for Defense Capabilities, Research, Procurement and Arms Development (European Defense Agency) was established by Council Decision 2004/551 as of 12 July 2004. Article 42 of the Treaty on the European Union calls on the European Defense Agency one of the main tasks of the EU to improve the military capabilities of the Member States. To this end, it establishes operational requirements, promotes measures for their satisfaction, contributes to the identification and implementation of any measures that are useful for strengthening the industrial and technological base of the defense sector, participates in the development of a European policy on potentials and weapons, and helps the Council to assess degree of improvement of military potentials.

The European Union’s satellite center, established by Council Decision 2001/55 as of 20 July 2004, has become an essential element of the development of a common EU security and defense policy, in particular, for monitoring crisis situations. In particular, the positive experience of its operation was noted during the promotion of EU operations in the Balkans and in joint activities with the United Nations. The EU Institute of Security Studies, established in accordance with the decision of the Council of the EU 2001/554 as of July 20, 2001, with a focus in Paris to conduct research, exchange scientific advances and prepare expert opinions for other EU institutions in the field of European security. The EU Operational Center operates in the EU Military Staff system and contributes to the EU’s capabilities in planning and providing military operations. Lastly, it is important to note that the EU Council Decision 2004/197 as of 23 February 2004 established a special mechanism for the management of the use of common European Union operations that have an impact on military and defense issues, i.e. Athena. This mechanism is designed to manage funds to cover common costs for relevant military or defense missions. Athena is used within the framework of a special committee, which includes representatives of the states that make financial contributions for the implementation of this operation. Thus, despite the rather complicated institutional framework of the CFSP, it can be argued that the European Council, the Council of the European Union and the High Representative of the Union for Foreign Affairs and Security Policy with the European External Action Service have the main significance in the process of functioning and decision-making in this area.
Globalization and its meaning for the EU

The European Union, which today brings together advanced Western democracies, is a well-established entity that objectively attracts the states of Eastern and Southeastern Europe, which consciously have chosen a democratic direction for their development and wish to occupy a worthy place in the European economic space. The process of strengthening European integration as an independent factor is of particular importance for states in the East of the continent and the surrounding regions whose countries seek to deepen their ties with the European Union. According to E. Nolte, the driving force behind EU enlargement is nothing more than the ideological commitment of many Europeans to the concept of an enlargement of the Union, if it takes place at a minimal cost and leaves undemocratic and authoritarian beyond the bounds of the country’s enlargement (Nolte, MacLehose, & McKee, 2004). The effects of globalization can also be attributed to the leveling of the state’s leading position in ensuring the security of the society, especially internal security. Thus, the security object is expanding, justifying, on the one hand, EU involvement in the affairs of other unstable regions, such as the Middle East, Africa, and Central Asia. On the other hand, the priority of the individual over the state prepares a fertile platform for implementing projects to create a world government that cares about the safety of all people without exception on the planet.

Research in the direction of European security

The European Security Doctrine was formed relatively recently, and its creation was the result of both internal, related to the logic of EU development and external factors. One of the most important think tanks in Europe in the field of global security is the European Union Institute for Security Studies. The European Council on Foreign Relations is another influential research center in the field of security. In 2010, the Council published the article named “The illusion of order and the formation of a multipolar Europe”. It focuses on assessing the geopolitical situation in Europe, which, in the opinion of the authors, has turned into a multipolar system: “Although Europeans welcomed the birth of a multipolar world, they almost did not notice that in parallel is formed and a multipolar Europe, which is characterized by an increasing competition between the main forces of the continent – the EU, Russia and Turkey – for influence in the newly established States, formed after the collapse of the Soviet Union and Yugoslavia” (Krastev & Leonard, 2017). In 2008, the European Council issued a new document entitled “Ensuring Security in a Changing World”. The principles of European security remained virtually unchanged: a stronger, more united and capable Europe, participation in the life of its neighbors, as well as cooperation with partners, to which the other members of the BRICS - Brazil and South Africa - were added.

Conclusion

Given the events of recent years, security issues in Europe are of particular relevance. European countries are building national security systems based on own national interests, vision and analysis of political processes taking place in the world, as well as political experience and the professional competence of political elites.

Many countries in Europe are members of the North Atlantic Treaty Organization (NATO). The Euro-Atlantic Alliance is a significant component of the national security systems of the dominant number of countries in Central and Eastern Europe. Considering the dynamism of the integral processes in Europe, the countries with the greatest security load are among those countries.

National security systems in Europe differ in the role of national security actors. The approaches of the leading European countries differ in terms of the geography of national security interests. The conceptual documents of the European countries identify the role of intelligence as a strategic tool in preventing threats to national security.
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ENERGY SECURITY FACETS: VERIFICATION OF HORTICULTURAL WOODEN WASTE POTENTIAL WITH BIOENERGY DEVELOPMENT PURPOSE

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Abstract. The significant volume of bio-waste is coming from horticulture due to the treatment of perennial plantations. Horticulture wooden waste looks like a promising feedstock for the further utilization by bio-based energy sector. Moreover, using waste obtained in the result of trees’ trimming and perforation might provide high economic and environmental impact in the energy balance of the country. Unfortunately, currently, the potential of this wooden waste is not used fully. Partly, this caused with lack of accurate data about available resource especially in the developing countries such as Ukraine. In this study, assessment of energy, economic and geographical potential of horticulture wooden waste was proposed following up to case-study of biomass potential analysis. The research was based on the case study in one region but the obtained results were scaled on the country level. Additionally, it was found that the diversity of methods of waste biomass volume assessment in horticulture depended on the farm type, since highly developed industrial farms and small households carry out gardening on the different ways.

Keywords: bio-based energy; bio-waste feedstock; horticulture wooden waste valorization; economic potential; energy potential; geographic potential


JEL Classifications: O13

1. Introduction

1.2. Matter of energy security: Energy security is one of the most important components of the national security. The main risks of energy security, along with water and food security, have social, economic and environmental nature (Šincāns et al. 2016; Dobrovolskiene et al. 2017; Tvaronaviciene et al. 2017; Kiseľáková et al. 2018; Rocha, Neves 2018; Cardoso et al. 2018; Ivanova, Latyshov 2018; Muniz et al. 2018; Monni et al. 2018; Ivanov et al. 2018; Plenkina et al. 2018; Tvaronaviciene 2018; Iorio et al. 2018; Shakovskaya et al. 2018; Kiseľáková et al. 2018). Nowadays, the concerns also might be caused by unpredictable political reconfigurations of leading solid fuel producers as Ukrainian example has shown. As a result, since 2014 energy security in Ukraine have been developed under threat and requires finding the ways out of a critical situation.
In 2015, the structure of total primary supply of energy resources was characterized by a high part of natural gas (28.9%, 26 mln tons of n.e.) according to the State Statistics Service of Ukraine. The part of nuclear power was 25.5% (23 mln tons of n.e.); coal - 30% (27 mln tons of n.e.); raw oil and petroleum products - 11.6% (10.5 mln tons of n.e.); biomass (biomass, fuel and waste) - 2.2% (2 mln tons of n.e.); HPS - 1.1% (1 mln tons of n.e.); thermal energy (thermal energy of the environment and waste resources of technogenic origin) - 0.6% (0.5 mln tons of n.e.) and wind and solar energy together - 0.1% (0.1 mln tons of n.e.). The total part of all renewable energy sources was 3.6 million tons of n.e. or only 4%. In 2015, from the field of view of limited natural resources in Ukraine, the index of import dependence rate was 51.6% including supply of nuclear fuel that caused a risk for energy security.

The New Energy Strategy of Ukraine until 2035 “Safety, energy efficiency, competitiveness” expects “increasing the use of biomass in generation of electrical and heat energy”. Thus, it is provided that the part of renewable energy sources in Ukraine will be 25% including biomass, biofuel and waste - 11.5% by 2035 (Table 1). That is, the importance of biomass production is increasing in Ukraine.

<table>
<thead>
<tr>
<th>Sources of primary energy supply</th>
<th>2015 (reality)</th>
<th>2020 (forecast)</th>
<th>2025 (forecast)</th>
<th>2030 (forecast)</th>
<th>2035 (forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>30.0</td>
<td>22.0</td>
<td>16.1</td>
<td>14.3</td>
<td>12.5</td>
</tr>
<tr>
<td>Natural gas</td>
<td>28.9</td>
<td>29.3</td>
<td>31.0</td>
<td>30.8</td>
<td>30.2</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>11.6</td>
<td>11.5</td>
<td>9.2</td>
<td>8.2</td>
<td>7.3</td>
</tr>
<tr>
<td>Atomic energy</td>
<td>25.5</td>
<td>29.3</td>
<td>32.2</td>
<td>29.7</td>
<td>25.0</td>
</tr>
<tr>
<td>Biomass, biofuels and waste</td>
<td>2.2</td>
<td>4.9</td>
<td>6.9</td>
<td>8.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Solar and wind energy</td>
<td>0.1</td>
<td>1.2</td>
<td>2.4</td>
<td>5.5</td>
<td>10.4</td>
</tr>
<tr>
<td>HPS</td>
<td>1.1</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Thermal energy</td>
<td>0.6</td>
<td>0.6</td>
<td>1.1</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Including fossil resources</td>
<td>96</td>
<td>92</td>
<td>88</td>
<td>83</td>
<td>75</td>
</tr>
<tr>
<td>Including renewable resources</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>17</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: https://www.kmu.gov.ua/ua/npas/250250456

It should be noted that directions of energy development in Ukraine are in line with the tendencies in energy sector of the EU and meet the criteria of sustainable development. The EU Directive 2009/28/ “On promoting of energy use of renewable sources” created the basis for promoting of renewable energy sources in the EU and established obligatory national target indexes, namely: by 2020, the part of renewable sources of energy in final energy consumption should reach on average to 20% in EU-28 including in transport - 10%.

Moreover, increase in the part of using renewable energy sources will remain for the further one of the strategic objectives of the economic development in European Union. EU States-Members have already agreed about a new target indicator of the use of renewable energy sources in final energy consumption which should reach at least 27% in 2030.

According Eurostatistics information, the part of renewable sources of energy in gross final consumption of energy was 16.7% in 2015 or it doubled in the last decade. In the context of EU countries, there was broad amplitude of the part of renewable energy sources in gross energy consumption: from 5.0% in Luxembourg and Malta to 53.9% in Sweden.

In terms of the European Union countries, Estonia (93.8%), Lithuania (92.1%) and Poland (90.1%) make the largest part of energy from biomass and waste, and the smallest part is produced by Cyprus (31.7%), Spain (38.2%) and Malta (40 %).
Energy from biomass and waste processing of 64% is a significant part regarding the structure of renewable energy sources in the EU unlike in Ukraine (Figure 1).

**Figure 1.** The structure of renewable energy sources in Ukraine and EU-28 in 2015, %

*Source: http://ec.europa.eu/eurostat/web/energy/data/energy-balances*

The part of energy from biomass and waste is only 2.2% in Ukraine. This index is extremely low in the terms on the total expecting potential. Thus, this is important to assess the potential of biomass energy production in Ukraine. However, this is especially important to estimate bio-waste potential regard to energy production as most promising source of renewable energy production as well as which has not cross interests with food security issues.

### 1.2. Matter of sustainability:

Due to the importance of horticulture wooden waste as a renewable feedstock for energy production, it is necessary to understand additional benefits from its utilization such as economics, environmental, social and etc.

From the one hand, energy sources diversification is conditioned by the concept of sustainable development studied by many scientists (Twidell, J. and Weir, T., 2015). At the same time, grousing of biowaste using was targeted to the problem of maximization energy income with simultaneous cost reduction, from the other one. Moreover, Veronika Dornburg and André P.C. Faañ (2001) noted that economic and energy efficiency of biomass using also depended on such key factors as logistics costs, the degree of heat utilization and scale effect which was quite significant.

European countries as well as Brazil, India and USA use biomass widely to energy supply and promote the development of necessary knowledge and technologies. Thus, back in 1998, scientists D.O.Halla and J.I.Scrasea (1998) proved the need to turn to the use of alternative sources of energy. They pointed out that potential resources for bioenergy were large, especially in the countries rich in forests, in highly developed countries where there was a surplus of agricultural land, as well as in many other countries where high yields of biomass could be possible. Therefore, they expected that biomass would become an important source in the future. Potential of global biomass can satisfy one third of the projected global demand for energy in 2050 (Dornburg et al. 2010).

Energy obtained from the wood has become one of the most important types of renewable energy long ago in many countries around the world. Such researchers as Song N. and Aguilar FX. (2017) improved that energy from wood biomass was historically the most significant source of renewable energy in the USA which was used not only for heating but also for electricity production. Global supply of wood biomass could satisfy 2-18% of world consumption of primary energy needs in 2050 due to available volume. However, it is important to evaluate not only the volume of resources but also the potential effectiveness of their using regards to competition with the other consumer’s needs.
Stock of wooden biomass is significant in some of EU countries. Thus, the total combined available potential in Europe is 76 million m$^3$ of wood biomass from forests, with additional 90 million m$^3$ from increasing forest areas and 98 million m$^3$ from fast-growing plantations (Mola-Yudego et al., 2017). According to their conducted studies, Germany and France showed a high potential from both agriculture and forest; Finland and Sweden had a great potential from forest resources; and Spain, Poland and the UK had a potential from fast-growing plantations.

As was mentioned before, wooden biomass utilisation is a promising branch of energy usage diversification in Ukraine. Following to the data getting from the Ministry of Statistics of Ukraine, agriculture takes a third place due to its share in the GDP with around 12%. In this study, we were focused on the horticulture bio-waste potential as one of the less studied.

Horticulture is a traditional branch of agriculture in Ukraine which has a centuries-old history. Horticulture industry is well developed almost throughout the country and in recent years its share about 5% in the total volume of agriculture production. Moreover, it observes enough space and conditions to further its development. There are primarily connected with dissatisfied demand for fruit production in Ukraine and export opportunities of the industry. Thus, for the last decade the level of fruit consumption in Ukraine was at the rate of 35-50 kg per person that is extremely low and does not correspond to scientifically substantiated norms of consumption (82 kg in Ukraine). For comparison: the rate of fruit consumption in the USA, Italy, Germany, the Netherlands is 100-140 kg.

In addition, horticultural industry became highly profitable (Table 2), which will contribute to its development and give impulse for planting new areas of perennial plantations.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Horticulture area, total, thsn. ha</td>
<td>424.9</td>
<td>299.2</td>
<td>255.3</td>
<td>209.9</td>
</tr>
<tr>
<td>Horticulture area processed by large and middle size farms, thsn. ha.</td>
<td>277.7</td>
<td>146.2</td>
<td>94.3</td>
<td>61.7</td>
</tr>
<tr>
<td>Horticulture area processed by small farm and households and middle size farms, thsn. ha.</td>
<td>147.2</td>
<td>153.0</td>
<td>161.0</td>
<td>148.2</td>
</tr>
<tr>
<td>Harvested, thsn. t</td>
<td>1452.6</td>
<td>1689.9</td>
<td>1746.5</td>
<td>2153.0</td>
</tr>
<tr>
<td>Profitability, %</td>
<td>-1.1</td>
<td>12.7</td>
<td>14.9</td>
<td>58.3</td>
</tr>
</tbody>
</table>

*Source*: calculated by authors based on the data obtained from [http://www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)

Finally, agricultural production in Ukraine is shared up between extremely big agricultural producers (Agro Holding), which could process more the one million hectares of the arable per company; middle-size (100-500 ha) and small farms (20-100 ha); and households (size of which limited by 20 ha). Such diversification is able to provide to the stability of horticulture products and bio-waste supply due to logistics and infrastructure optimization. Importance to notice, the leading position of horticulture productions remains under the households, whose part in the production of this type of products varied within 82-88%, from 2000 to 2015 (Fig. 2).
The main objectives of this paper would be focused on the assessment of horticulture bio waste potential focused on its economic, energy and geographical outcomes. Reaching this, it is necessary to evaluate existing potential of horticulture bio wastes production under the application of different production technologies.

The current study may help to solve the problem of identification of horticulture bio-waste potential on the different regional level, especially for the Eastern European countries and Russia.

2. Materials and Methods

The combination of different methodologies and data were applied to estimate horticultural bio-waste potential with bioenergy development purpose. Horticultural bio waste is biomass which was obtained in the result of after pruning and trimming of perennial plantations.

2.1. Data Sources

In this study, there were used data provided by official national statistical authorities such as State Statistics Service of Ukraine. Price index for barrel of Brent oil at London Stock Exchange was used to estimate economic potential of wooden waste based on the average oil price in the third quarter of 2015. The data sets contains information concerning availability of all areas under perennial plantations in Ukraine corresponding to the farm category. Based on this type of data the evaluation of production potential of bio-waste as well as its geographical availability was calculated.

2.2. Experimental background

The study experimental part was carry out on the experimental fields of Uman National University in Ukraine. Obtained result was spread out on the rest country’s regions with horticulture production based on the official statistical data. There are gardens of various types with different measurement technologies on the experimental fields.

There are gardens of various types with different production technologies on the experimental fields reflecting to main existent horticulture production processes and corresponding with different farm types. Large and medium size farms, mainly, plant gardens under intensive gardening technologies on dwarf and semi-dwarf rootstocks (Figure 3, A). In this case, fruit trees enter the fruit for 2-3 years after the laying of the garden. At the same time, households still are keeping a large-scale gardening technology, which is characterized by a larger reserve of wood with the less frequency of trimming trees (Figure 3, B).
Differences in the production approaches define computation methods of estimation potential of wooden bio-waste in the result of tree trimming and pruning.

**Method I.** This is the simple method requires involving of 1-2 people. Several trees are selected accidentally in studied area (not less than 10), all biomass is collected manually and weighed. The advantages of this method are simplicity of performing, absence of the need for using of industrial scales. The main problems caused by significant errors of estimation in the result of high deviation within samples (tree size, type of pruning, and etc.) as well as sample size which should include as at least 10 trees.

**Method II.** Evaluation of bio-waste obtained from the particular plots. The size of plots could variety from 50 to 200 m². For this study, the plot at 100 m² was used. All biomass is gathered by hand only inside the area. The advantages of this method are more accurate estimation due to the inclusion of more trees in one sample and averaging the value of each tree in the sample. However, the estimation bio-waste outcomes by plot size is more labour-intensive compared to method I and attracting the means of mechanization is sometimes necessary in the case of measuring under removing a plantation.

**Method III.** There is evaluation of bio-waste outcome from the whole field or along several lines. Gathering of biomass is done from a large area which allows getting exact results. However, such gathering should be made in a mechanized way.

The first method will be the most reasonable for the case if just one person makes measurements. However, method III evaluation of bio-waste outcome the whole area will be more exact but more costly in the case of machinery using.

It should be noted that since gardens occupy small areas in households, it is more appropriate to measure the amount of wood biomass using method I described in the methodology which does not require labour mechanization. And methods II and III are more reasonably to apply for industrial gardens.

The methods of assessment of energy, economic and geographical impact were used on the second step of this study.
2.3. Theoretical background

The theoretical part of methodology based on the previous research (Geletukha G.G., Zhieliezna T.A. and others, 2010) is proved three possible ways of biomass potential determination:

- **physical availability.** There are two main variables of estimation of this potential: theoretical estimation of the total volume of biomass which can be obtained from currently processed production areas; and technical capacity defines by certain technical and structural conditions and current technological capabilities. The physical availability was estimated through the practical approaches describing above. It should be taken into account that availability coefficient for waste is equal to 0.9 when calculating physical availability of wood biomass.

- **energy potential** determines by thermodynamic properties of materials. Recalculation in conventional fuel was done through the heat of combustion of 10 MJ/kg (natural humidity) was apply for wooden waste.

- **economic potential** is the part of technical potential that meets the criteria of economic expediency under the given conditions. Economic potential of horticulture wooden waste was estimated using a cost expression of the oil equivalent of one ton of conventional fuel. The calculation was done through the application of the next equations:

  \[ E_k = (P\times k)\times P, \]

  where: \( E_k \) - expression of economic potential;
  \( P \) - physical availability;
  \( k \) – transmission coefficient of conditional fuel (tone) into the oil equivalent (barrels), where \( k = 4.79; \)
  \( P \) – oil price $ per barrel, where \( P = 50.7 \)

**Geographic potential** of horticulture wooden waste was determined applying method of grouping which made it possible to divide areas of Ukraine into zones according to physical availability of the wood waste following up to the work done by Dornburg et al (2001).

3. Results

The potential scope of wooden waste was calculated on the basis of data received by the practical way, using the methods of economic analysis and processing of statistical data. The available potential of horticulture wooden waste was determined in the process of study.

The volume of potential physically available wooden waste per one hectare of cultivated area was obtained in the result of experiments on the base of gardens in the Uman National University of Horticulture (Table 3)

<table>
<thead>
<tr>
<th>Experiment number</th>
<th>Method I</th>
<th>Method II</th>
<th>Method III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.993</td>
<td>4.588</td>
<td>4.844</td>
</tr>
<tr>
<td>2</td>
<td>2.330</td>
<td>5.012</td>
<td>4.698</td>
</tr>
<tr>
<td>3</td>
<td>2.071</td>
<td>4.870</td>
<td>5.032</td>
</tr>
<tr>
<td>4</td>
<td>2.487</td>
<td>4.495</td>
<td>4.760</td>
</tr>
<tr>
<td>5</td>
<td>2.109</td>
<td>4.835</td>
<td>4.266</td>
</tr>
<tr>
<td>Average per one ha</td>
<td>2.200</td>
<td>4.760</td>
<td></td>
</tr>
</tbody>
</table>

*Source:* authors’ calculations

It was found that the average outcome of wooden waste is 4.76 t/ha under intensive growing technology while it is only about 2.2 t/ha in the case of a large-scale gardening technology application (Table 4).
Theoretical potential of horticulture wooden waste formed after their pruning and eradicating is possible to calculate on the basis of given data (Table 4).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Limited by technical capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large and middle size farms</td>
<td>293.7</td>
<td>264.3</td>
</tr>
<tr>
<td>Small farms and Households</td>
<td>326.0</td>
<td>293.4</td>
</tr>
<tr>
<td>All categories</td>
<td>619.7</td>
<td>557.7</td>
</tr>
</tbody>
</table>

Given result were used to found potential of physically available horticulture wooden wastes on the country level. There is around 620 thousand tons annually. Physical availability of wooden waste per region is reflected below in the part of geographical potential.

However, accessible wooden waste is limited by current technical capacity on the level around 558 thousand tons, annually since availability coefficient for wood waste is set at the rate of 0.9.

Amount of energy potential from wooden waste in horticulture industry in Ukraine was estimated on the level of 191.0 thousand tons of conditional fuel (c.f.) per year (Fig.4). Which can be successfully used by farmers covering their own needs. Following to the fact that nowadays horticulture wooden waste in Ukraine is not already considered as a commodity product and is usually simply burned at the edge of the field, and horticulture industry has great prospects for development, then its energy use can be a powerful tool for replacing of fossil fuels in the future.

Using of horticulture wooden waste also may bring an economic effect, which is lied in:
1) reduction of dependence from purchased energy sources;
2) decrease in cost price of agricultural products;
3) mastering production of new types of products;
4) coming out to new markets.

We calculated that economic potential of horticulture wood biomass after can reach 46 438 thousand of UAN (around $1.5 mill US dollar) annually while using the methodology with taking cost expression of oil equivalent of one tonne of conventional fuel (Fig.5).
Finally, analysis of geographic potential of horticulture wooden waste in Ukraine was performed.

Geographic potential of horticulture wooden waste in Ukraine is directly dependent on the location of horticulture production area (Table 5, Fig. 6).

All regions could be united into the three main geographical groups due to the production potential of horticulture wooden waste:

1) with potential of wood biomass under 20 thsn. t.;
2) with potential of wood biomass from 20 to 40 thsn. t.;
3) with potential of wood biomass over than 40 thsn. t.

Region with the highest potential of wooden waste feedstock includes Vinnytsia, Chernivtsi, Khmelnytskyi and Dnipropetrovsk oblast. The third group (with the poorest potential of wooden waste feedstock) contains 10 regions, and the second group includes 9 regions. This confirm the fact that the biggest part of the territory of Ukraine has favourable conditions fo bio-based energy development.
Figure 6. The geographic potential of horticulture wooden waste by region, thsnd. T

Source: own calculation

Analysis of geographic potential on the regional level of Ukraine affects the formation of production and service infrastructure, creation of logistics centres; non-profit cooperatives on processing of horticulture wooden waste, on determine necessary capacities, etc.

Thus, summing up the above, one can conclude that there is significant potential of horticulture wooden waste in Ukraine.

4. Discussion

At the same time, there are considerable barriers in the development of energy using horticulture wooden waste formed after their pruning and eradicating in Ukraine. According to the researches of Bioenergy Association of Ukraine (Geletukha G., 2017), the main barriers can be classified by the following groups:

- technical and organizational – the need for additional technological equipment, at all stages of production of wood mass from pruning and gathering to its using; problems in organization of the logistics chain; a small amount of waste in one supplier, and therefore the need to join into cooperatives; non-developed infrastructure in the regions;
- normative – lack of state standards for solid biofuel; administrative barriers while creating a business concerning selling of wood waste as a fuel;
- economic and financial – the need in significant investments for purchasing of equipment; high credit rates and high cost price of finished biofuel;
- structural – unformed biomass market as fuel in Ukraine; competition with the shadow firewood market; absence of service companies that provide services in gathering, crushing and transportation of biomass; state monopoly on supply of wood biofuel to existing consumers;
- cultural – complexity of activity coordination among all the members of production chain; unwillingness of farmers to unite in service cooperatives and their misunderstanding of economic benefits from selling of their own waste, etc.
It should be highlighted that wooden waste utilization may have a significant social impact. Though this study was not focused to investigate it but obtained result could be used as a background for further study of the social effects of wooden biomass using.

**Social effect.** Use of horticulture wooden waste in horticulture also has a social effect. It shows itself in:
- diversification of rural economy;
- creation of new organizational structures and workplaces;
- development of rural areas;
- improvement of population health;
- ensuring welfare and life quality of rural population.

Thus, for example, nowadays Vinnytsia region (occupies the first place by potential of wood biomass in the field of horticulture) has 170 boiler houses on solid biofuel with a total capacity of 125 MW, in particular, in 2016 the largest boiler house on wood in Ukraine with the capacity of 5.2 MW was built in Vinnytsia, which, in addition to reducing the need of the region’s population in energy from traditional sources, causes creation of new working places, rising of people’s income, development of rural areas, etc.

Favourable conditions for the development of bioenergy using biomass from horticulture wooden waste were created in Ukraine, consisting of:
- significant potential of horticulture wooden waste;
- availability of a large number of biofuel consumers;
- support of the state policy of energy saving in the country and diversification of the ways of supply biofuel;
- availability of domestic equipment for gathering, crushing and burning wood in Ukraine.

**Conclusions**

There is a rapid development of bioenergy in Ukraine, as well as in developed countries of the world. It is necessary to study potential of horticulture wooden waste taking into account that horticulture is a well-developed industry of economy. At present, biomass occupies only 2.2% in the structure of renewable energy sources in Ukraine, while this rate is 28-64% in the EU. However, specific part of biomass, biofuel and waste should increase to 11.5% by 2035 according to the New Energy Strategy of Ukraine.

Use of horticulture wooden waste in gardening, except economic effect also may have strong ecological and social effect. Combination of these effects requires further development of bioenergy using horticulture wooden waste in Ukraine.

Significant part of the territory has favourable conditions for the development of bioenergy on the basis of horticulture wooden waste. Besides, such factors will contribute to the development as significant potential of horticulture wooden waste; availability of a large number of biofuel consumers; support of the state policy of energy saving in the country and diversification of the ways of supply biofuel; availability of domestic equipment for gathering, crushing and burning wood in Ukraine.

Barriers in the development of energy using horticulture wooden waste formed after their pruning and eradicating can be divided into the following groups: technical, organizational, financial, economic, normative, structural and cultural.

**Acknowledgments**

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A manual for organizing field measurements of the amount of biomass from waste trimming and stump extraction. The Internet. Access: http://ua.up-running.eu.


EVOLUTION OF SOCIAL RESPONSIBILITY APPLIED TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT: MAINSTREAM OF THE 20TH CENTURY

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Abstract. This article presents a historical background of Corporate Social Responsibility (CSR) evolution since 1950s to the contemporary concept which represents CSR as a process to integrate social, environmental, ethical, human rights and consumer concerns into business operations and core strategy in close corporation with multi-stakeholders of enterprise. As we enlarged the scope of our research we found an extensive panorama of theories about corporate social responsibility, an abundance of approaches, and diverse descriptions of the models. Corporate social responsibility can be called corporate conscience, corporate citizenship, social performance, or sustainable responsible business. The first part of this research paper offers a historical overview of CSR, to facilitate the account from a thematic point of view which switching-over to the CSR evolution into different concepts.

Keywords: corporate social responsibility; ethics; sustainable development; sustainability, responsible behavior; stakeholders


JEL Classifications: L22, L24, L25

1. Introduction

Over the past two decades, the social and ethical behavior of enterprises more commonly known as Corporate Social Responsibility (CSR) have been the focus of social debate. During this time, the CSR has been progressing worldwide, but developing in a heterogeneous way. Variations exist in the conceptual terms of CSR, origins of the concept, paths of its development, the nature of stakeholder involvement, and in institutional aspects (regulation, and cultural-cognitive issues). This field has become the center of debate in which competing interests negotiate over issue interpretation (Hoffman, 1999). Corporate social responsibility (CSR) has experienced a journey that is almost unique in the pantheon of ideas in the management literature. Its phenomenal rise to prominence in the 1990s and 2000s suggests that it is a relatively new area of academic research (Crane, Matten, McWilliams, Moon & Siegel, 2009; Kuntsyna et al., 2018). The field of corporate social responsibility (CSR) presents a landscape of theories (Klonski, 1991; Mele, 2008; Kulvić, Rančák, 2018), a proliferation of approaches (Garriga & Mele, 2004; Windsor, 2006), and different definitions of the concept (Carroll, 1979;
Fisher, 2004). According to Matten and Moon (2008), defining CSR is not easy. Firstly, because CSR having relatively open rules of application (Moon, Crane, & Matten, 2006). Secondly, CSR is an umbrella term overlapping with some, and being synonymous with other, conceptions of business-society relations (Matten & Crane, 2005). Thirdly, it has clearly been a dynamic phenomenon (Carroll, 1979; Matten & Moon, 2008). As we enlarged the scope of our research we found an extensive panorama of theories about corporate social responsibility (Klonoski, 1991; Mele, 2008; Martell, 2011), an abundance of approaches (Garriga and Mele, 2004; Winsdor, 2006, Monni et al. 2017), and diverse descriptions of the models (Carroll, 1979; Fisher, 2004, Arbidane, Iveta Mietule, 2018). Corporate social responsibility can be called corporate conscience, corporate citizenship, social performance, or sustainable responsible business (Wood, 1991; Bilan, 2013; Vveinhardt and Andriukaitiene, 2017; Dobrovolskienè et al., 2018).

Some authors denounce a difference between the Canadian (Montreal school of CSR), the Continental European and the Anglo-Saxon approaches to CSR (Williams & Aiguilera, 2008). The field of empirical CSR research generally has been hampered by the lack of a consistent definition of the construct of CSR, as well as its operationalization and measurement, as recently pointed out by McWilliams and Siegel (2006) and Rodriguez, Siegel, Hillman and Eden (2006). They further explain the lack of universal definition about CSR and how it affects research. According to them there exist a few empirical studies which show cross-national differences in managerial attitudes towards CSR [...] this lack of consistent findings can be explained, in part, by the lack of a universal definition of CSR» (Williams & Aiguilera, 2008). In the first part of this article we offer a historical overview of CSR, to facilitate the account from a thematic point of view which switching-over to the CSR evolution.

2. An overview of Corporate Social Responsibility definition

In 1950, the main focus was on the responsibility of business to society, and to do good for society. In the 1960s, key events, people and ideas have played an important role in characterizing the social changes ushered in during this decade. In the 1970s, business leaders on traditional management functions in matters of corporate social responsibility, while in 1980, the business and social interests of the company came closer and become more responsive to their members. In the 1990s, the idea of CSR has become almost universally accepted, CSR also has been associated with the strategy literature, and finally, in the 2000s, CSR has finally become an important strategic issue (Madtrakimova, 2013; Boyko and Derun, 2016; Ushakov et al., 2017; Kliestik et al., 2017; Muniz et al., 2018; Orlova et al., 2018; Vegera et al., 2018; Akhmetova et al., 2018; Mishenin et al., 2018; Bogdanovič et al., 2018; Radwan, 2018). The beginning of a systematic analysis was initiated in the first research paper by Bowen’s ”Social Responsibility of a Businessman” published in 1953 (Bowen, 1953). Later, Carroll described CSR through a model that comprehensively describes essential aspects of corporate social performance. The three aspects of the model dressed major questions of concern to academic and managers like: What is included in Corporate Social Responsibility? What are social issues the organization must address? What is the organization’s philosophy or mode of social responsiveness? (Carroll, 1979). The fundamentals of the nature of Corporate Social Responsibility and CSR definition were elaborated in 1980s. This period elaborated the concept of ”Business Ethics”, "Corporate Philanthropy", “Corporate Social Policy”, and “Management of Stakeholders”. The principle research actors of that period were, Jones, Drucker, Patrick and Cochran, and Epstein. This research movement brought about the original definitions of CSR to be further developed and results in the subsequent research on CSR and alternative thematic frameworks. Corporate Social Responsibility (CSR) has experienced a journey that is almost unique in the pantheon of ideas in the management literature. It’s phenomenal rise in the rise to prominence in the 1990s and 2000s suggests that it is a relatively new area of academic research.

It is difficult to pinpoint exactly when the concept of social responsibility began to develop. Some date it to the beginning of the 1920s, with the creation of the concept of venture philanthropy that related to acts of an individual nature attributable to the owners rather than to internal policies of the company. However, previously in 1889, the industrialist, entrepreneur and philanthropist Andrew Carnegie, a US citizen of Scottish origin, published The Gospel of Wealth where he held that the life of an affluent businessman should comprise two parts, the first devoted to gathering and accumulating wealth and the second to the subsequent distribution of that
wealth for noble causes. Philanthropy was the way to make life worthwhile (Carnegie, 1889). In the 1930s, Edward Bernays and Harwood Childs, public relations specialists, forecasted that the issue of social responsibility would become increasingly significant in the future development of corporations. Bernays assured that a public relations advisor should be well informed of social changes and capable of proposing pertinent adjustments to organizational policies. Childs, on his part, stressed the analysis of the relations between a corporation and its environment (cited in Palavecino, 2007). Years later, in 1953, in book Social Responsibilities of the Businessman, Howard R. Bowen asked: What responsibility to society may businessmen reasonably be expected to assume? Most scholars agree that Bowen at that time marked the beginning of the modern era of social responsibility (SR) (e.g., Carroll, 1979; Butler, 1987; Wood and Cochran, 1984; Windsor, 2001; Spencer and; Tencati, Perinni, 2006; Secchi, 2007; Maak, 2008). There is no easy way to summarize how the concept of social responsibility was growing, however, if there was limited evidence of CSR thought in the 1950s and before, the decade of the 1960s marked a momentous growth in attempts to formalize or more precisely state what CSR meant. The term “corporate social responsibility” became popular and has remained a term used indiscriminately by many to cover legal and moral responsibility more narrowly construed (Richard T. De George, 2011).

One of the first, and most prominent scholars in thus period to define CSR was Keith Davis, who later extensively wrote about the topic in his business and society textbooks, later revisions, and articles. Davis posits forth his definition of social responsibility by arguing that it refers to: «Businessmen’s decisions and actions taken for reasons at least partially beyond the firm’s direct economic or technical interest» (Davis, 1960). Davis argued that the social responsibility was novelize idea but should be seen in a managerial context. He asserted that some socially responsible business decisions can be justified by a long, complicated process of reasoning as having a good chance of bringing long-run economic gain to the firm, this paying it back for its socially responsible viewpoint (Davis, 1960). Davis was one of the cutting edge with thus insights, inasmuch as this view became commonly accepted by the late 1970s and 1980s. Davis contributions to early definitions of CSR were so important that he should be considered as the runner-up to Howard Bowen for the «Father of CSR» designation ((The Oxford Handbook of Corporate Social Responsibility, 2009).

In the 1960s, there was a shift in terminology from the Social Responsibility of business to CSR. The notion that powerful organizations have to be accountable to society or else lose asserted ethical values became more frequent after the issue of business ethics started in the late 1970s, and some outstanding scholars, such as William C. Frederick (1960, 1986), expressed their concern over business responsibility and advocated a normative ethical foundation of CSR. One of his views is following: “Social responsibility in the final analysis implies a public posture toward society’s economic and human resources and a willingness to see that those resources are utilized for broad social ends and not simply for the narrowly circumscribed interests of private persons and firms” (William C. Frederick, 1960) Clarence C. Walton, an important thinker on business and society, in a book Corporate Social Responsibilities (1967)), addressed many facets of CSR addressing the role of the business firm and the business person in modern society. In this significant book, he presents a number of different varieties, or models, of social responsibility. His fundamental definition of social responsibility presented in a following quote: «... the new concept of social responsibility recognizes the intimacy of the relationships between the corporation and society and realizes that such relationships must be kept in mind by top managers as the corporation and the related groups pursue their respective goals...» (Clarence C. Walton, 1967).

Walton goes on to emphasize that the essential ingredients of the corporation’s social responsibilities include a degree of voluntarism, as opposed to coercion, an indirect linkage of certain other voluntary organizations to the corporation, and the acceptance that costs are involved for which it may not be possible to gauge any direct measurable economic returns (Clarence C. Walton, 1967). Despite a vast and growing body of the literature on CSR and on related concepts, defining CSR was not easy. At the core of CSR is the idea that it reflects the social imperatives and the social consequences of business success. Thus, CSR empirically consist of clearly articulated and communicated policies and practices of corporations that reflects business responsibility for some of the wider societal good. CSR is therefore differentiated from business fulfillment of core profit-making responsibility and from social responsibilities of government (Friedman, 1970).
Harold Johnson’s Business in Contemporary Society: Framework and Issues (1971), one of the first books of the decade to address CSR, presents a variety of definitions or views of CSR. Johnson proceeds to critique and analyse them. He first presents what he terms «conventional wisdom». Following is a definition that describes this conventional wisdom: «A socially responsible firm is one whose managerial staff balance a multiplicity of interests. Instead of striving only for larger profits for its stockholders, a responsible enterprise also takes into account employees, suppliers, dealers, local communities, and the nation» (Johnson, 1971)

It is worth noting that Johnson is alluding to a precursor of the stakeholder approach as he references a «multiplicity of interests» and actually names several of these specific interests-groups. It is clear that the interests of employees and philanthropy-recipients are no longer exclusive with respect to company’s CSR initiatives (The Oxford Handbook of Corporate Social Responsibility, 2009). A ground-braking contribution to the concept of CSR came from the Committee for Economic Development (CED) in its 1971 publication, Social Responsibilities of Business Corporations. The CED introduced this topic by observing that «business functions by public consent and it’s basic purpose is to serve constructively the needs of society – to the satisfaction of society (CED, 1971). The CED articulated a three circles notion of social responsibility. The inner circle includes the clear-cut basic responsibilities for the efficient execution of the economic function – products, jobs and economic growth. The intermediate circle encompasses responsibility to exercise this economic function with a sensitive awareness of changing social values and priorities: for example, with respect to environmental conservation; hiring and relations with employees; and more rigorous expectations of customers for information, fair treatment, and protection from injury. The outer circle outlines newly emerging and still amorphous responsibilities that business should assume to become more broadly involved in actively improving the social environment (ex. poverty and urban blight) (CED, 1971). It is important to note that the CED’s influential views of CSR was that the CED was composed of business people and educators and thus reflected an important practitioner view of the changing social contract between business and society and businesses’ newly emerging social responsibilities. Another significant writer on corporate social responsibility in the 1970s was George Steiner. In his textbook, Business and Society (1971), Steiner deferred to Davis’s and Frederick’s definitions of CSR but he did state his opinion on the subject as follows: «Business is and must remain fundamentally an economic institution, but... it does have responsibilities to help society achieve it basic goals and does, therefore, have social responsibilities. The larger a company becomes, the greater are these responsibilities, but all companies can assume some share of them at no cost and often a short-run as well as a long-run profit» (Steiner, 1971).

Steiner did not dwell on definitions, but he extended the meaning and circumstances under which CSR might be interpreted and applied. He discussed specific spheres in which CSR might be applied and presented (Steiner, 1971), he also presented criteria for determining the social responsibilities of business. Keith Davis opened the discussion of CSR in his landmark article presenting the case for and against business assumption of social responsibilities (Davis, 1973). He quotes two well-known economists and their diverse views on the subject. First, he quotes Milton Friedman whose famous objection is familiar to most. Friedman contended that «few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible (Friedman, 1962). Elbing (1970) describes the social responsibility framework (businessman has a responsibility more important than profit maximization), opposed to the economic framework (businessman has one singular responsibility to maximize profits of its owners). Yet, Davis counters this view with a quote by Paul Samuelson, another distinguished economist, who argued that «a large corporation these days not only may engage in social responsibility, it had damn well better try to do» (Samuelson, 1971). Above these observations, Davis in 1973 proposed to define CSR as follows: «For purpose of this discussion it (CSR) refers to the firm’s consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm».

The period of 1970s also gives reference on discussions about corporate social responsiveness (Ackerman 1973; Ackerman and Bauer, 1976), corporate social performance (CSP), as well as corporate social responsibility. The major writer who made this distinction was S. Prakash Sethi. In his research (1975), Sethi discussed ‘dimensions of corporate social performance’ and in the process distinguished between corporate behaviors that might be called «social obligation», «social responsibility», and «social responsiveness». Sethi presented
schema, where social obligation is corporate behavior «in response to market forces or legal constraints. The criteria here are economic and legal only. Social responsibility, by contrast, goes beyond social obligation. Sethi states: «Thus, social responsibility implies bringing corporate behavior up to a level where it is congruent with the prevailing social norms, values, and expectations of performance».

Sethi goes on to say that while social obligation is prescriptive in nature, social responsibility is perspective in nature. The third stage in Sethis model is social responsiveness. He regards this as the adaptation of corporation corporate behaviour to social needs. This stage is anticipatory and preventive (The Oxford Handbook of Corporate Social Responsabilité, 2009). Dow Votaw’s (1972) articulated the concern that many writers in this period had with CSR. He stated: The term (social responsibility) is a brilliant one; it means something, but not always the same thing, to everybody. To some it conveys the idea of legal responsibility of liability; to others, it means socially responsible behavior in an ethical sense; to still others, the meaning transmitted is that of ‘responsible for’, in a causal mode; many simply equate it with a charitable contribution; some take it to mean socially conscious; many of these who embrace it most fervently see it as a mere synonym for ‘legitimacy’, in the context of ‘belonging’ or being proper or valid; a few see it as a sort of fiduciary duty imposing higher standards of behavior on business than on citizens at large. Preston and Post (1975), following the Votaw’s thinking, stated the following about social responsibility: «In the face of the large number of different, and not always consistent, usages, we restrict our own use of the term social responsibility to refer only to a vague and highly generalized sense of social concern that appears to underlie a wide variety of ad hoc managerial policies and practices. Most of these attitudes and activities are well-intentioned and even beneficent; few are patently harmful».

They lack, however, any coherent relationship to the managerial unit’s internal activities or to its fundamental linkage with its host environment. An important attempt to bridge the gap between economics and other expectations was offered by Archie Carroll (1979). His efforts culminated in the following proposed definition of corporate social responsibility: «The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time».

Carroll’s four categories or domains of CSR have been utilized by numerous theorists (Wartick and Cochran, 1985; Wood 1991; Swanson, 1995, 1999) and empirical researchers (Aupperle, 1984; Aupperle, Carroll, and Hatfield, 1985; Burton and Hegarty, 1999; Clarkson, 1995; Ibrahim and Angelidis, 1993; Mallott, 1993; O’Neill, Saunders, and McCarthy, 1989; Pinkston and Carroll, 1996; Smith, Wokutch, Harrington and Dennis, 2004; Spencer and Butler, 1987; Strong and Meyer, 1992; Grabara et al., 2016; Paulik et al., 2015; Gherghina and Vintilă, 2016; Vegera et al., 2018, Mishenin et al., 2018). Several business and society and business ethics texts have incorporated Carroll’s CSR domains (Boatright, 1993; Weiss, 1994) or have depicted the CSR Pyramid (Carroll and Buchholtz, 2000, 2003; Trevino and Nelson, 1995). According to Wood and Jones (1996), Carroll’s four domains have «enjoyed wide popularity among SIM (Social Issues in Management) scholars». Such use suggests that Carroll’s CSR domains and pyramid framework remain a leading paradigm of CSR in the social issues in management field. Due to the acceptance and impact of Carroll’s CSR contributions, it may be appropriate to re-examine his model to determine whether it can be modified or improved or if there is a possible alternative approach to conceptualizing corporate social responsibility. During the two periods since 1980s and 1990s, the responsibilities attributed to businesses changed and became the concept of ‘power’. In the 1980s the focus on developing refined definitions of CSR gave way to research into alternatives concepts and them such as corporate social responsiveness, corporate social performance, public policy, business ethics and stakeholders theory/management, just to mention a few. Thomas M. Jones (1980) entered the CSR discussion with an interesting perspective. He defined CSR in a following: «Corporate Social Responsibility is the notion that corporations have an obligation to constituent groups in society other that stockholders and beyond that prescribed by law and union contract. Two facets of this definition are critical. First, the obligation must be voluntarily adopted; behavior influenced by the coercive forces of law or union contract is not voluntary. Second, the obligation is a broad one, extending beyond the traditional duty to shareholders to other societal groups such as customers, employees, suppliers, and neighboring communities».
to constituent groups in society other than stockholders and beyond what is prescribed by law and union contract. Several aspects of this definition received some criticism. Different researchers argued that the obligation must be voluntarily adopted. The critics realized that behavior influenced by coercive forces of law or union contract are not voluntary. The obligation is a broad one, extending beyond the traditional duty to shareholders to other societal groups, such as customers, employees, suppliers, and neighboring communities (Ibid, 59-60). One of Thomas M. Jones contributions was to put emphasis on Corporate Social Responsibility as a process. He argues that it is hard to reach consensus as to what constitutes Socially responsible behavior. He illustrated how a firm could engage in a process of CSR decision making that should constitute CSR behaviour (Ibid, 66).

For successful application of CSR, businesses needed to be dealing with the same concept and to have the same understanding of (Okoye, 2009). Later in 1983 Archie B. Carroll further elaborated on his 1979 four-parted definition of CSR: «CSR involves the conduct of a business so that it is economically profitable, law abiding, ethical and socially supportive. To be socially responsible ... than means that profitability and obedience to the law are foremost conditions to discussing the firm’s ethics and the extent to which it supports the society in which it exists with contributions of money, time and talent. This, CSR is composed of four parts: economic, legal, ethical and voluntary or philanthropic» (Carroll, 1983).

In 1987, professor Edwin M. Epstein from Haas School of Business University of California Berkeley, proposed a definition of CSR in connection to social responsibility, responsiveness and business ethics, and then brought them together into» Corporate Social Policy Process». In 1987, Edwin M. Epstein provided a definition of CSR in his quest to relate social responsibility, responsiveness, and business ethics. He pointed out that these three concepts dealt with closely related, even overlapping, themes and concerns (Epstein, 1987). He defined CSR as a following: «Corporate Social responsibility relates primarily to achieving outcomes from organizational decisions concerning specific issues or problems which (by some normative standard) have beneficial rather than adverse effects on pertinent corporate stakeholders. The normative correctness of the products of corporate action have been the main focus of corporate social responsibility».

In addition to defying CSR, Epstein (1987) proposed definition to corporate social responsiveness and business ethics and then brought them together into what he called the «corporate social policy process». He added: «The nub of the corporate social policy prices is the institutionalization within business organizations of the following three element ... business ethics, corporate social responsibility and corporate social responsiveness».

In the 1990s, the CSR concept was transformed significantly in alternative theories, such as Stakeholder theory, Business Ethics theory, Corporate Social Performance, and Corporate Citizenship. This period did not create new definitions, but enriched the body of CSR literature. The 1990s onwards saw an influx of authors attempting to create such opportunities by combining business and society, which, according to American professor Donna J. Wood are «interwoven rather than distinct entities» (1991). According to Donna J. Wood (1991), Corporate Social Responsibility (also called corporate conscience, corporate citizenship or sustainable responsible business) as a form of corporate self-regulation is integrated into business model. CSR policy functions as a self-regulatory mechanism whereby a business monitors and ensures its active compliance with the law, ethical standards and international norms (McWilliams, Siegel, 2001). Wood expanded and set forth a Corporate Social Performance model that captured CSR concerns. She presented her model primarily builds on Carroll’s three-dimensional CSR model (Carroll, 1979) and the Warwick and Cochran (1985) model. Later, the CSR were recognized by Cannon (1992) who stated that business contributes to society and communities in «efficient, profitable and socially responsible» ways. The opportunity to maintain a competitive advantage from individualized CSR efforts, therefore, still prevails (Holcomb, Upchurch and Okumus, 2007). According to Reder (1994) individualizing the CSR can be defined by highlighting two processes: «… all-encompassing notion 'corporate social responsibility' refers to both the way a company conducts its internal operations, including the way it treats its workforce, and its impact on the world around it». This definition sparked the beginning of a number of comprehensive descriptions of CSR, where business was encouraged to focus on what is important to them individually, whilst reinforcing the claim that some areas of CSR are dependent on time and place (Reder, 1994; Blindheim and Langhelle, 2010). The understanding of social responsibility continues its transformations reflecting to contemporary issues in all spheres of life.
Conclusions

Corporate social responsibility (CSR) has experienced a journey that is almost unique in the pantheon of ideas in the management literature. After the long-term evolution, Corporate Social Responsibility became an ethical and responsible route for business, thus CSR is a way of creating sustainable way of living whilst preserving the profitability of business space, for people within and outside of its. CSR is not a traditional management tool, thus it can be viewed as a moral duty of enterprises, as a sustainable way of business conduct, which is reinforcing the need for clear guidance and a deeper understanding of responsibility that corporations and all of different stakeholders caring in front of society. With the expansion of globalization, intensification of competition and increased ecological footprint of Transnational Corporations, in particular in developing countries, the activities of businesses which focus on both social and environmental impacts have increased as an integral part of core business operations and management. A different guidance could be a framework that breaks CSR down into manageable chunks and processes. CSR could be defined to contain a number of minimum requirements and to entail a system of corporate accountability through regulatory intervention and enforcement of obligations. Such enforcement could be manifested through the system of standardization. One of the brightest examples is The GRI Sustainability Reporting Standard.

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EVALUATIONS OF SECURITY MEASURES: THE PECULIARITIES OF THE APPLICATION OF MEDIATION IN THE AREA OF RESOLVING CRIMINAL LEGAL CONFLICTS

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Abstract. The alternative methods of dispute resolution are new field of study in Latvia. In most cases procedural issues of these methods and their real practical application are outside any legal regulation. One of these alternative dispute resolution methods is called mediation. Person, who is responsible for the management of this process, is called mediator. The meaning of this term is known from the ancient civilization times. It is useful to understand the initial comprehension of mediation in order to successfully implement this process in the legal system of modern society. Nevertheless the elaboration of mediation procedure asks serious evaluation of possibilities in order to completely evolve basic principles of alternative dispute resolution methods in the legal system of any country. Answering on question whether it is possible to completely realize the concept of mediation, it is necessary clearly understand, what it is and how you can use the advantages of this process in real life. Application of mediation in the Latvian criminal law obeys to the special requirements and depends on certain circumstances.

Keywords: security; mediation; State Probation Service; mediation subjects; conflict settlement; Latvia

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JEL Codes: K10, K14, K40

1. Introduction

The criminal-law conflict is closely linked to a wide range of variations in the usage of mediation: agreement between the victim and the offender on the settlement of a conflict with the participation of a third neutral party, without any participation of law enforcement agencies; agreement between the victim and the offender on the settlement of the conflict during the preliminary stage of the pre-trial investigation; agreement between the victim and the offender on the settlement of the conflict in the procedural stage of court proceedings; agreement between the victim and the offender on the settlement of the conflict at the procedural stage of the execution of the trial decision; conciliation between the parties of the dispute with legally binding consequences, if the dispute complies with the conditions, prescribed by law, for the termination of criminal proceedings and reconciliation has been achieved because of participation of State Probation Service mediator or with the participation of state authority. In the author’s opinion, in majoriy of cases it is more effective to use mediation variations, than to apply traditional litigation in the area of criminal dispute resolution (e.g. Jurkevičius, Bublienė 2017; Ardalan et al. 2017; Šišulák 2017; Limba, Šidlauskas 2018; Kordík, Kurilovská 2018; Lietuvnikė et al. 2018).
Analyzing the scope of the term “mediation” regarding the area of the resolution of criminal disputes in the Republic of Latvia, it is necessary to mention, that one and the same term can be defined differently, for example, depending on the background knowledge of the parties of dispute, depending on the purpose to be achieved, depending on the area, in which mediation has been used, etc. The Mediation Law (The Mediation Law 2014) passed by the Latvian Parliament on May 22nd, 2014, does not provide a sufficient clarity about how, according to the legislator, term „mediation” could be defined in the area of resolution of criminal disputes. The legal regulation of mediation in the field of public law could not be found in the other regulatory enactments of Latvia. At the same time, some Latvian researchers (Judins 2005; Luksa 2012) doctrinally define mediation in the area of resolving criminal matters as a victim and offender conciliation (Jefimovs 2017). However, it would be wrong to perceive the concept of mediation in the field of public law too broadly or vice versa, too narrowly, merely as a victim and offender conciliation in the criminal proceedings.

For the correct formulation of the concept of mediation in the area of resolving criminal conflicts it is necessary to define and take into account all the features, that reflect the qualitative characteristics of this term. Moreover, defining the meaning of mediation in the field of public law, it helps to clarify the content of the concept, highlighting the general and specific features of the term. That helps to distinguish between the research object and other similar concepts, and it helps to draw conclusions about its specific place in the content of similar concepts. The term “mediation in the area of resolving criminal legal disputes” in international law means any process, involving the victim and the offender of the criminal offense, who, freely and without any influence, agree to eliminate the problems, caused by a criminal dispute, acting with the help of a neutral third party (mediator) (Recommendation No. R (99) 19 of the Committee of Ministers to member States concerning mediation in penal matters 1999). Making research of mediation in the area of resolving criminal legal issues in Latvia, it is necessary to analyze a question of the current mechanism for applying mediation in the area of public law and what needs to be improved in the mediation process for the facilitation of its wider and more effective use.

2. Settlement as a legal institute

Currently legal regulation of Latvia isn’t proposing an application of mediation in criminal disputes (Tamberga 2014). However, the laws passed in recent years point to the existence of separate elements of mediation in Latvian criminal law. For example, since 1999 Latvian criminal law proposes the settlement between a victim and an offender, which is the basis for the release of a person from criminal responsibility; since 2004, the Law on the State Probation Service defines an amicable settlement with an intermediary; the institute of conflict settlement is also defined in the Criminal Procedure Law (Judins 2005). The qualification requirements for subjects, organizing an amicable settlement, are specified in the Regulation of Cabinet of Ministers No.782 (adopted 20 November 2007) „The procedure, by which the State Probation Service certifies voluntary probation officers, who are intermediaries in a settlement” (Regulation of Cabinet of Ministers No.782 “The procedure, by which the State Probation Service certifies voluntary probation officers, who are intermediaries in a settlement” 2007) the arrangements for organizing a settlement process are included in the State Probation Service Law (State Probation Service Law 2004).

The philosophy of the institute of settlement is based on the restorative justice theory. A. Judins (2005) in the scientific paper “Settlement in the Latvian Criminal Law” points out, that restorative justice is a process, in which the offender, the victim and other interested parties agree on how to eliminate the consequences of the crime. He points out, that restorative justice give an opportunity to offender, victim and public (society) to participate in the liquidation of the consequences of crime. In the author’s view, the connection between restorative justice and mediation in the area of criminal dispute settlement is expressed in an objective way between the victim, the offender and the third neutral side - in the mediation process, in turn, the objective interaction of the parties is based on the restorative justice.

For the purpose of the effective implementation of restorative justice in the Latvian public law the law maker had to propose an implementation of the mediation process for the resolution of criminal disputes (Zahars,
Stivrenieks 2016). At this stage, the core ideas of the concept of restorative justice had to be adopted (Teivāns-Treinovskis, Amosova 2016): paying more attention to the negative consequences of crime, which is equally harmful to victim, offender and state. Another element of the concept of restorative justice is an inclusion of a wider range of subjects in the process of elimination of the consequences of crime. In the author’s opinion, the basic principles of the concept of restorative justice have been introduced in the Latvian public law system: national legislation provides an alternative process for the resolution of criminal legal proceedings through the participation of a neutral party; the process takes into account opinions of victim and offender on possibilities of conflict ending; dispute parties make an agreement on the terms of conflict resolution.

3. Settlement with participation of intermediary

State Probation Service Law defines settlement as a process of negotiations in which the victim and probation client shall participate and in which the help of intermediary shall be used, in order to rectify the consequences of a criminal offence and to reach a settlement between a victim and a probation client (Section 1, Paragraph 2) (State Probation Service Law 2004). Despite the fact that mediation is not mentioned in the legal definition of an amicable settlement, the connection between mediation and settlement is obvious. The definition of settlement includes several features, that are similar both to settlement and mediation:

- an alternative conflict resolution process;
- victim, offender and third neutral person participate in the process;
- neutral person helps to agree on resolution of the dispute.

Latvian researchers also point on the connection between mediation and settlement. For example, A. Judins (2005) points out, that during the settlement procedure individuals seeks to reach an agreement on negative consequences of criminal offence through mediation. J. Bartulis in the publication “Settlement as an alternative” describes the nuances of application of the settlement, which corresponds to the features of mediation: an opportunity to optionally resolve a conflict, participation of two persons - victim and offender, process is organized and managed by the third neutral person. M. Luksa (2012) in the article “Settlement as a substitute of litigation” defines the institute of settlement as a voluntary negotiation process between victim and offender, which is run by a neutral person – an intermediary, who helps the parties to agree on a mutually acceptable solution. Later in the article the term “mediation” is used instead of the term settlement”. It is necessary to agree, that institutes of settlement and mediation are objectively similar, they are based on the same principles. At the same time it should be noted, that these institutes are not identical, because mediation is a broader concept, than settlement.

Mediation is a general process of conflict resolution, which is implemented between two parties of dispute, under the management of the third neutral person, that results to the resolution of the conflict. Process of mediation aren’t regulated by any legal act (Brown 2002). Its main purpose is to restore relationships between parties of conflict. E. Uotila and S. Sambu (2010) point out, that the main benefit of mediation is a possibility of rebuilding people’s relationships. D. R. Froyd (2014) in the article “California Court-Connected Mediation: Appreciating the Influence of Power and Processes” points out, that the mediation process helps to achieve mutually supportive elements in the relationships between parties of dispute. A. Eye, E. Mun and P. Mair (2009) in the article “What Carries a Mediation Process? Configural Analysis of Mediation” points out, that the use of mediation helps to achieve a harmony in the relationships between parties of dispute. A. Judins (2005) expresses a similar view, pointing out, that the agreement between parties of dispute, achieved by the usage of mediation, is a significant social result. Reconciliation means, that conflict, caused by the violation of law, has been resolved and the person, who has been harmed, has received a moral and / or material compensation. The author agrees with the opinions of the above-mentioned researchers. Through mediation parties of dispute renew their human relationships. In turn, changes in a legal status, due to the use of mediation, may not occur. Legal acts may not give any legally binding meaning to the fact of mediation application. In the Criminal law principle of legal regulation “only permitted by law” is in effect (Neimanis 2004). In a case, if the use of mediation is not permitted in the legal provisions, the fact of its application will not have any legal consequences.
Legal consequences of the application of mediation arise only, if the relevant legal regulation proposes conditions for its application. In the Latvian legal system such a type of binding mediation is designated by the term “settlement”. Professor V. Liholaja (2009) from the University of Latvia points out, that application of settlement has legally binding consequences for the parties of dispute (Liholaja 2009). A. Judin suggests a similar assumption. He expresses an opinion, that the Latvian Criminal Procedure law takes into account only the result of settlement, rather than its procedure. K. Strada (2001) in the article “About an agreement in the Criminal Procedure Law” states, that settlement could be the basis for termination of any criminal case, if a guilty person has committed a specific criminal offense. It can be concluded, that application of settlement always has a legally binding effect. Comparing the mediation consequences and the consequences of the application of settlement, it is clear, that the institute of settlement is narrower, than the content of mediation.

4. Control of mediator activities

The State Probation Service organizes control and training of intermediaries, who perform alternative criminal dispute resolution operations. Since mediation as a dispute resolution process is a broader concept than settlement, notion of the term “mediator” in the mediation process and in the settlement process differs. In the scientific literature, the requirements for the qualification of mediators usually aren’t named. Researchers tend to focus on the personality and character of the mediator. For example, S. J. Imperati and S. M. Maser (2014) focuses on the personal characteristics of the mediator (“act as an actor”) to organize, lead and persuade dispute parties to agree on conflict resolution conditions. K. Kressel (2013) as one of the main criteria of professionalism of mediators determines the intuition, developed for high-level professionals. That feature gives an opportunity to mediator effectively use the mediation process in the area of dispute resolution. Common requirements for the qualification of mediators aren’t mentioned in national laws and regulations. For example, in the Republic of Lithuania the requirements for the qualification of mediators, who provide their services in the area of civil litigation, aren’t defined at a national level (Mediation in Member States - Lithuania 2015). At the same time in Finland these requirements are prescribed by law (Mediation in Member States - Finland 2015). Also, in Latvia, with the adoption of the Mediation Law, these legal relationships are regulated by legal norms. Taking into account, that legal scope of the term “mediator” is related with the institute of mediation, for the purposes of connection of the mediator with the institute “settlement” the term “intermediary” has been defined.

5. The role of the State Probation Service in the mediation process

An intermediary in mediation is an official of State Probation Service, who organizes and conducts a settlement process, or a volunteer, who is trained and certified to organize and manage a settlement process (Section 1, Clause 8 of the State Probation Service Law) (State Probation Service Law 2004). It means, that settlement could be organized and managed by the State Probation Service official or by a service-certified volunteer.

In the legal theory of Western law meaning of the State Probation Service and its authorities differs. H. Wood and G. Brown (2014) associate probation service competencies in the UK with the help of mentally disabled persons, who committed crimes. M. Dooris (2013) links the probation service’s competence with the improvement of health of violators and with other improvement measures. R. Hek (2012) examines probation service from the positions of social services and preventive measures. He emphasizes a crucial role of organizing a cooperation between the probation service, the police and students, who are planning to pursue a career in law enforcement agencies. J. L. Johnson (2014) pays more attention to the functions of the probation service in area of institutions of deprivation of liberty, monitoring the behavior of convicts, as well as controlling recently released individuals. The Eastern researchers have the same opinion on the probation service, that doesn’t differ significantly from opinion of their Western counterparts. For example, Russian scientist E. S. Rakhmaev (2009) points out, that the establishment of a probation service is based on the idea of a forced supervision of convicts, with the aim of controlling how a convict fulfills court imposed obligations, how is corrected behavior of a convict, how the convict is re-socialized and adapted to normal life. E. N. Shatankova (2008) pays more attention to the preventive nature of functions, performed by the probation service. S. P. Kubancev (2006) po-
ints out, that the probation service is a method of social rehabilitation of convicts and persons, released from imprisonment, without any penalty components. Similarly, the opinions of Latvian researchers about the scope of the functions, performed by the probation service, do not differ significantly (Zahars 2012).

This correlates with the fact, that establishment of the probation service was based on ideas of the 19th century about voluntary, philanthropic and, to a certain extent, religious, approach to the conviction of the criminals (Forbes 2010). An analysis of the current situation regarding the functions, performed by probation service, shows, that today it has transformed from an independent institution, providing social services to convicted persons, to the state-run institution, whose main purpose is to implement state policy in the fight against crime and to protect society from offenders (Smirnov, Lavrinenko, Tumalavičius 2018). E. N. Shatankova (2008) in the dissertation "Conditional conviction and probation abroad (comparative legal analysis)" points out, that the range of probation service’s functions may be related to criminal penalties (for example, in Sweden), with the other criminal law’s means of influence (for example, in the United Kingdom), with the release of a convicted person (for example, in Estonia), with performing of other, unspecified functions (for example, in the United States).

The legal status and authorities of the Probation Service of Latvia are regulated by the State Probation Service Law (2004). According to the law the main function of the probation service is the implementation of state policy by the execution of a criminal penalty - forced labor - and a compulsory measure of a corrective nature - public work, as well as supervision of probation clients and correction of social. The law also emphasizes the place of a State Probation Service in the national institutional structure, indicating, that it is under the supervision of the Minister of Justice.

One of the authorities of State Probation Service in the field of organization of the settlement procedure in Latvia is connected with the rights to train intermediaries, who organize and manage process of settlement. A general description of this function is indicated in the informative report, prepared in 2006 "On the organization and implementation of the function of State Probation Service - the settlement between the victim and the probation client through an intermediary” (An informative report "On the organization and implementation of the function of State Probation Service - the settlement between the victim and the probation client through an intermediary” 2006). The main criteria for acquiring an intermediary’s rights is the successful passing of an intermediary training program, which consists of two parts: theoretical - 28 hours and practical - at least three settlements has to be managed. Applicant also has to successfully pass a final examination (Regulation of Cabinet of Ministers No.782 "The procedure, by which the State Probation Service certifies voluntary probation officers, who are intermediaries in a settlement” 2007). All the examinations are approved by the Certification Commission, established by the State Probation Service. Intermediary authorities are granted for two years, with the rights to extend them. An applicant for participation in the study programm could be authority from the probation service or any other person, who hasn’t been prosecuted for the intentional commission of a criminal offense (State Probation Service Law 2004). There are no other legal options for becoming an intermediary in settlement.

Latvian legislator has formulated different qualification criteria for mediator position candidates. Mediation Law defines, that there are two types of mediators in Latvia: certified mediators and mediators. Requirements for applicants for the position of a certified mediator are related with a criteria of a certain age (at least 25 years), previous education (must be at least higher education), knowledge of the state language, passing of a training program (at least 30 hours) and final examinations. Also there are requirements, related with the lack of previous punishment. Certificate of a certified mediator is issued for 5 years with the right to extend it (Regulation of Cabinet of Ministers No.433 “Certification and attestation procedure of mediators” 2014). Determining the qualification requirements for certified mediators, it is assumed, that the country must have confidence in the high professionalism of these specialists (Luksa 2014). At the same time, Latvian legal system doesn’t prevent to get a mediator’s qualification for those person, who aren’t meet the previously mentioned requirements. The competence of these specialists is not guaranteed at the state level. These mediators are almost alike to certified mediators. However, in the court recommended mediation, certified mediators have the advantage (The first mediator certificates will be presented 2014).
Conclusion

Results of the research lead to a conclusion, that development of two institutes "mediation" and "settlement" occurred at the same time. Mediation as an alternative dispute resolution method is not regulated with legal acts. In turn, the procedure of settlement, as well as the conditions for its use, are regulated by legal acts of the Republic of Latvia. Settlement is used to resolve certain criminal disputes. Settlement process could be organized and managed by an official of the State Probation Service, or by a volunteer, who is specially trained and certified. Such an amicable settlement has legally binding implications. However, at the same time, the mediation process can be organized by any mediator with relevant experience and knowledge. This process can be implemented by settling any criminal disputes, without legally binding implications.

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SECURE DEVELOPMENT OF PUBLIC ADMINISTRATION

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Abstract. Public administration is a set of state institutions that mainly exercises the functions of the executive body (rather than legislative or judicial) in accordance with the law. Public administration includes the Cabinet of Ministers, institutions subordinate to the Cabinet of Ministers as well as other independent institutions. The aim of the research is to analyse the historical development of the Cabinet of Ministers and ministries, to emphasize the main stages of development of public administration, while highlighting the problems that existed both during the period of Latvia’s first independence as well as after the restoration of the state and seeking the best possible solutions for the further development of public administration. The study will use descriptive, dogmatic, historical, comparative and analytical research methods.

Keywords: security; development; public administration; Constitution, government; Cabinet of Ministers


JEL Codes: K1, K14, F52

1. Introduction

Different kinds of secure development of countries, financial sector, education, energy and other spheres were considered by different scientists in different times (Tvaronavičienė, Lankauskiene 2011; Makstutis et al. 2012; Dubauskas 2012; Hurbišová, Davidová 2016; Luzgina 2017; Monni et al. 2017; Al-Kahtani 2018; Kunitsyna et al. 2018; Kordík, Komarova et al. 2018; Kurilovská 2018; Limba, Šidlauskas 2018; Lietuvnikė et al. 2018; Tvaronavičienė, M. 2018a,b; Jankelová et al. 2018; Suleimenova et al. 2018; Petrenko et al. 2018). Consideration of the issues of safe development of the public sector was given little attention. This joint publication will appeal some issues in secure development of public and state administration area.

Public administration is a set of state institutions that, in accordance with the law, mainly exercises the functions of the executive body (rather than legislative or judicial). Public administration includes the Cabinet of Ministers, institutions subordinate to the Cabinet of Ministers as well as other independent institutions (Briede et al. 2016; Kuril 2018).

The term “state administration” was used in the process of drafting the law “The Concept of the Law on the State Administration Structure” (Levits, 2002) where its author states in the guidelines that Section 58 of The
Satversme of the Republic of Latvia (hereinafter – Satversme) mentions “state administration”. It meant that both direct and indirect administration (which in the 20’s and 30’s was, of course, within the subordination of the Cabinet (either directly subject or as a subordinate). A little later E. Levits (2005) writes that, irrespective of which public authority the relevant institution belongs to - both direct and indirect – state administration institutions must establish a united, mutually coherent system of government.

In Anglo-Saxon countries the term public administration is most often used in the same sense. It should be mentioned that the discussion here is not about substance, but only about terminology. What others want to refer to as “public administration” is here, referring to the traditionally accepted terminology of the Satversme and most of the continental European countries, denoted as “state administration”. The institutional system of public administration is a set of state administration institutions. Here, the function of the concept of “institution” is to identify organizational structures in a state administration system. In our opinion, the term “public administration” is to be preserved: it is an institution that has a specially created structure with its own staff and set of competences for the management of public administration, (Načisčionis 2009). In addition, J. Načisčionis (2018) notes in the given wording – specially created, taking into account that the function of the state is to be performed first; the function of the state administration arises out of the functions of the state, which in the literature can be “named” as a task and hence the formation of the structure. Undoubtedly, the topical issue is the need for the formation of public administration institutions (public administration structures). In the authors’ opinion, a possible public administration institution should be modelled considering whether it is necessary to simultaneously create new institutions for the performance of public administration function(s), or whether the functions to be performed can be assigned to an already existing public administration institution by simply enhancing its competence. This is the path to a smaller number of public administration institutions. This is the path to more efficient public administration.

In this research, the term “public administration” will be used to indicate the range of institutions subject to the Law on the State Administration Structure, therefore it will not cover the institutions that mainly implement legislative functions (Saeima) and judicial decision-making functions (judicial authorities), as well as other state organs mentioned in the Satversme (State President, State Audit Office) (Briede et al. 2016).

The aim of the research is to analyse the historical development of the Cabinet of Ministers and ministries, to emphasize the main stages of development of public administration, while pointing out the problems that existed both during the period of Latvia’s first independence and after the restoration of the state and seeking the best possible solutions for the further development of public administration.

2. The formation and development of the Cabinet of Ministers and Ministries (1918–1934)

2.1. People’s Council

The Latvian nation got the opportunity to realize its right to self-determination in the wake of the defeat of Germany in the First World War. According to Article 12 of the Armistice of Compiègne signed in Germany on November 11, 1918, German troops remained in the eastern parts, hence also in the territory of Latvia, until the time governments would be formed that enjoyed the confidence of the local people and the Allies would acknowledge that the conditions for the withdrawal of the German troops were appropriate, taking into account the internal circumstances in these territories (Leber 2000).

On November 17, 1918, the People’s Council of Latvia (hereinafter – TP) was established and its political platform was adopted as a result of negotiations between the members of democratic political parties of Latvia, which took place from November 12 to November 17, 1918. In total, at the time of its establishment the TP consisted of 40 members, representing a wide spectrum of democratic political forces in Latvia. Later, in autumn 1919, the number of TP members reached 183. The TP was not an elected representative of the people, although many of its members were elected to various elected bodies in the period of democracy during the revolution of 1917. Therefore, the TP should be considered as a pre-parliamentary body - the interim legislature until the
democratic elections of the Latvian Parliament, which was impossible to organize in the autumn of 1918 and 1919 due to the German occupation and civil war. A TP presidium consisting of a total of 6 members – a chairman with 2 members and a secretary with 2 members – was established to organize the TP work. Janis Čakste was elected the chairman of the presidium of the TP. TP elected K. Ulmanis as the head of the Latvian provisional government – Prime Minister, instructing him to form a Cabinet of Ministers at short notice (Leber 2000).

The Republic of Latvia was proclaimed on November 18, 1918. TP, proclaiming the independent state of Latvia, was not an elected institution and lacked the necessary democratic legitimacy for the adoption of the constitution of the country. Consequently, in the act of proclamation of the independent state the TP already included the provision that “the Satversme and relations with foreign countries will be determined in the near future by the Constitutional Assembly” (Government Gazette, 1918).

On August 19, 1919, the TP adopted the Law on the Election of the Constitutional Assembly of Latvia. The Constitutional Assembly elections in Latvia took place on April 17 and 18, 1920 with the participation of 85% of those with voting rights. The Constitutional Assembly was opened on May 1, 1920. Janis Čakste was elected as the chairman of the Satversme. The Constitutional Assembly adopted two interim constitutional acts – “Declaration of the State of Latvia” and “Provisional provisions of the Latvian State Mechanism”. With this, the Constitutional Assembly continued the legislative work of the TP, thereby legalizing its activities (Načisčionis, Veikša 2017).

As pointed out by K. Dišlers, a democratic, law-governed state is not conceivable without the Constitution, which determines its legal foundations. The first constitutional function of such a state begins with the drafting of the constitution. In those circumstances, it was understandable that the TP platform had been developed in great hurry, and this act combined two tasks: to draft the fundamental provisions of the transitional constitution and to highlight the key programme of actions of the provisional government. The poor draft of the “platform” is therefore understandable and excusable but in evaluating this act, one must not forget that the act not only includes the provisional constitution but also significant action items of the government program. The political platform of the Latvian TP was divided into 7 chapters, of which no economic mechanisms can be found in the third chapter – “The sovereign power and the political and economic system of the state” – which only set out the political system with its two highest authorities: the People’s Council and the interim government (Cabinet of Ministers). In turn, the “Transitional Provisions of the Latvian State Mechanism”, although briefly, however, clearly and definitely formulated the machinery of a democratic parliamentary republic. The supreme state organs were the Constitutional Assembly, the Cabinet of Ministers, and some of the functions of the President were entrusted to the President of the Constitutional Assembly (Dišlers 1930).

The transitional provisions of the Latvian state machinery, adopted by the Constitutional Assembly on 1st June 1920 were the model of the state power structure developed by the Constitutional committee, bearing in mind also the future Satversme. Consequently, quite a lot of state institutional structures were already featured in this act, which, with some minor improvements, were later to be included in the Satversme itself. Article 3 of the transitional provisions stipulated the principle that the Constitutional Assembly, namely, the Parliament, issued the necessary laws and approved the state budget and loans. This norm defined the powers of the parliament, which were later accorded to the Saeima in Articles 64, 66 and 73 of the Satversme. Article 6 of the transitional provisions included the principle that executive power belonged to the Cabinet of Ministers. Also, this norm stipulated that the all the state institutions and the command of the armed forces were subordinated to the Cabinet of Ministers. The Satversme also foresaw the Cabinet of Ministers as a constitutional executive power; the establishment of the President’s Institute has not affected this aspect of the state apparatus. The Article 58 of the Satversme was also created on the basis of this norm. The Article 7 of the Transitional provisions “The Cabinet of Ministers is formed by a person invited by the President of the Constitutional Assembly to do so “has been in the same way reformulated in the Article 56 of the Satversme – “The Cabinet is invited by a person invited by the President to do so”. Article 8 of the transitional provisions stipulates the responsibility of the Cabinet of Ministers to the Parliament: “The Cabinet of Ministers is responsible for its activities to the Constitutional Assembly and should resign if it has lost the confidence of the Constitutional Assembly.” This provision is also
As K. Dišlers stated in 1930, the Constitutional Assembly had two tasks: to draft and adopt the fundamental law of the state and the law on agrarian reform. But at the same time, the Constitutional Assembly also fulfilled the duties of the legislator: issued the necessary laws, decided on the state budget and loans, decided on war and peace, and ratified international agreements concluded with other countries. The executive power belonged to the Cabinet of Ministers, whose competence at that time was broader than the current competence of the Cabinet of Ministers, because “all state institutions and the command of the armed forces” were under its authority. According to the present constitution, the President of Latvia (Article 42 of the Satversme of the Republic of Latvia) is the supreme leader of the armed forces and not all state institutions but just “public administrative institutions” are subject to the Cabinet of Ministers (Article 58 of the Satversme of the Republic of Latvia). However, it must be assumed that when the Constitutional Assembly was in power, public (administrative) authorities with the exception of judicial institutions were subordinated to the Cabinet; in any case, during that time the judicial authorities were completely independent, and the Cabinet could not influence their actions. The Cabinet of Ministers was formed by a person invited by the President of the Constituent Assembly. Here we see that the President of the Constitutional Assembly was granted the functions of the President: he appointed the Prime Minister. In the same Act – ”Transitional Provisions of the Latvian State Mechanism” – we find that relations between the Constitutional Assembly and the Cabinet of Ministers were already clearly defined on the basis of a parliamentary system, namely: “The Cabinet of Ministers is responsible for its activities to the Constitutional Assembly and should resign if it has lost the confidence of the Constitutional Assembly” (Dišlers 1930).

K. Dišlers noted that the TP and the Provisional government of Latvia, which was established by it (hereinafter – the PV), undertook taskless accounting – the creation and administration of the state of Latvia on the grounds that the people of Latvia, the only sovereign state, were unable under certain circumstances (the German occupation, the movement of Soviet Russian troops in the territory of Latvia after the cessation of the Treaty of Brest (peace agreement)) to express their free will. Professor K. Dišlers stressed in particular that it was impossible for the people to express their free will in circumstances where there was no appropriate legal structure (the necessary laws, the technical organization of the political system, such as officials, election commissions, public representation institutes, etc.), which had to be set up by clerk/civil servants who undertook to manage people’s affairs. Taking into account that immediately after the liberation of the entire territory of Latvia in April 1920, the Constituent Assembly elections were held, following which the TP set aside, its powers, it is to be regarded as responsible negotiorum gestor (clerk). Roman law provided that a taskless clerk should act in the way required by the objective interests of the case, so that the owner, if he/she had the opportunity to express his/her will, would be satisfied with the proceedings. The decisions of the Constitutional Assembly regarding the constitutional structure of Latvia brilliantly showed that the TP acted in line with the interests of the great majority of the population. The TP united all the democratic political forces in Latvia, which were the only ones capable of ensuring the democratic process of self-determination of the people of Latvia (Leber 2000).

The Constitutional Assembly terminated its work on November 7, 1922, when at 12:00 the Satversme of the Republic of Latvia entered into force (Načiščionis, Veikša 2017).

2.2. Satversme of the Republic of Latvia

The Satversme of the Republic of Latvia adopted by the Constitutional Assembly on February 15, 1922, published on June 30 and entered into force on November 7, 1922, as K. Dišlers (1930) pointed out, was the formal Constitution of Latvia in the narrower sense; in order to get the formal Satversme in the broader sense, the Satversme of the Republic of Latvia had to be integrated with several other laws, inter alia the law on the Cabinet of Ministers law, the general provisions of the Law on the Ministry of Interior. The state organs mentioned in the Satversme were as follows:
1) Citizens;
2) Saeima;
3) President;
4) Cabinet of Ministers;  
5) Ministers;  
6) Courts;  
7) The State Audit Office.

Part 1 of the Satversme, which consisted of seven chapters and 88 articles, including the Cabinet of Ministers (Articles 55–63), was adopted on February 15, 1922. The chapter 1 “General Provisions” proclaimed the most important constitutional principles of the Latvian state machinery, which was already included in the “Declaration on the State of Latvia” issued on May 27, 1920: “Latvia is an independent democratic republic” (Article 1) and “the sovereign power of the State of Latvia is vested in the people of Latvia”. The chapter 4, “The Cabinet of Ministers”, defined the composition, the procedure for the formation of the supreme executive body and the scope of its authority. The Cabinet of Ministers included the Prime Minister and ministers invited by him/her (Article 35). It was composed by the Prime Minister invited by the President of the Republic to do so (Article 56). The administrative institutions of the State were under the authority of the Cabinet of Ministers (Article 58). Article 59 stipulated the responsibility of the Cabinet, as well as of separate ministers to the Saeima. The competence of the meetings of the Cabinet of Ministers determined that the Cabinet shall discuss draft laws prepared by the ministries, issues affecting the activities of several ministries and state issues raised by members of the government (Article 61). The Cabinet of Ministers was granted the right to declare a state of emergency if the existence of the Latvian State was threatened with external and internal threats (Article 62). The ministers and their authorized state officials were granted the right to participate in sittings of the Saeima and its commissions, propose additions and amendments to the draft laws submitted (Article 63) (Leber 2000).

As pointed out by V. Blūzma, the normative regulations of the executive power were outlined in the Satversme in a very general manner, leaving out issues related to the decision-making procedure of the Cabinet of Ministers, the level of competence and responsibility of the Prime Minister and Ministers, the procedure for legal or administrative prosecution of the Prime Minister and the Ministers etc. (Leber red., 2000).

2.3. Appointment of the Prime Minister

As pointed out by K. Dišlers, according to Article 56 of the Satversme, “the Cabinet of Ministers shall be formed by a person invited by the President to do so”. This means that the person - and only the person who has been formally invited by the President of the State (by an appropriate act) – has acquired the right to form the Cabinet of Ministers; this “invitation” then actually means appointing a Prime Minister. This act, by its very nature, is a decree and moreover an important decree; however, on the basis of Article 53 of the Satversme, it is given by the President of the State without any counter signature. This provision is mainly explained by a certain difficulty concerning counter signature of this act. The question arises, which of the Prime Minister will then counter sign the new act of appointment of the Prime Minister, the outgoing or the newly invited? From the formal side, this act could be counter signed by the outgoing Prime Minister or one of his cabinet members, as these ministers remain in their offices and so have to fulfil all the functions of the ministers until handing over the office to the newly-established Cabinet of Ministers. But if none of the members of the outgoing Cabinet wants to assume responsibility any longer for a lawful act and refuse to counter sign it, then it is impossible to force them to do it. Whatever may be the motives of the legislator, the relevant provisions of our Satversme are absolutely clear: the formal appointment of the Prime Minister is carried out by a single act of the President of the State, without any counter signature. This, however, does not mean that the President of the Republic has the freedom of choice of the Prime Minister since “the Prime Minister and ministers need the Saeima’s confidence to hold their office” (Article 59 of the Satversme), it would meaningless to appoint a Prime Minister who would not get the confidence of the Saeima and would not be allowed to hold office (Dišlers 1930).

2.4. The organisation of the Cabinet of Ministers and its functions

The Cabinet is composed of the Prime Minister and the Ministers. In accordance with Articles 55 and 56 of the Satversme, the Prime Minister is invited, i.e. in fact, is formally appointed by the President, but Ministers are
invited (i.e., appointed) by the Prime Minister (Satversme: Articles 55 and 56). The composition of the Cabinet was determined by the “Law on the Cabinet of Ministers” (adopted on March 20, 1925) (Dišlers 1930).

According to K. Dišlers (1930), after establishment of the main body of the Satversme, the following functions of the Cabinet of Ministers could be noted:

1) **Legislative function.** According to Article 65 of the Satversme of the Republic, the Cabinet of Ministers had the right to initiate laws.

2) **Creative function.** As state administrative institutions were under the authority of the Cabinet of Ministers and ministers were heads of separate departments, the Cabinet of Ministers and ministers had the right to appoint or approve a large part of civil servants according to the provisions of the Civil Service Law. In addition, the Cabinet of Ministers had the right to appoint officials in various institutions that were not subordinate to them: the Cabinet of Ministers appointed judges and members of the State Audit and members of collegial departments, which were all approved by the Saeima.

3) **Administrative and economic function.** The budget was approved by the Saeima but the draft budget was prepared and submitted to the Saeima by the Cabinet of Ministers.

4) **Administrative police function.** This function included the important right granted to the Cabinet of Ministers in Article 62 of the Satversme – to declare a state of emergency in cases when the state is threatened by an external enemy or when a state of internal insurrection which threatens the existing system arises or threatens to arise. However, the decision of the Cabinet of Ministers is not final, the Saeima may revoke or uphold it.

5) **Defensive, federal and administrative-cultural function.** These functions were entrusted to individual ministers.

6) **Regulatory function.** This function is particularly specific to the Cabinet of Ministers as the supreme collegial administrative authority. The activities of the various state departments need to be coordinated and planned, and the direct task of the Cabinet of Ministers is to bring about unity, coherence and planning into the administrative work of the state. This function is manifested in the so-called government policy, and it is definitely noted in Article 61 of the Satversme, according to which the Cabinet discusses all “issues related to the activities of several ministers, as well as the issues of state policy proposed by individual members of the Cabinet”.

The Satversme contains norms, which, prior to its adoption, were introduced into the legal system of Latvia by the laws passed by the People’s Council or the Constitutional Assembly. For example, the original wording of Article 81 of the Satversme on the right to issue transitional regulations was already included in the Law on the Cabinet of Ministers. The wording of the first part of Article 28 of the Satversme was already formulated as such in the Law on the Immunity of People’s Council Members (Valdības vēstnesis 1919).

Article 81 of the Satversme also referred to the rights of the Cabinet of Ministers in the sphere of legislation, namely the right to issue regulations with the force of law in emergencies. As V. Blūzma points out, this right was already granted to the Latvian Government in the past, taking into account the practice of the government, with the adoption of the TP Act as of July 16, 1919. The grant of legislative powers to the Cabinet of Ministers made it possible to improve the efficiency of the legislature. The legislative competence of the Cabinet of Ministers was limited by the fact that it could not be related to the laws on elections of the Saeima, the court system and procedural laws, the budget, the laws adopted by the Saeima and amnesty that was under the competence of the Saeima (Article 45). If the Cabinet of Ministers did not submit these regulations for approval within three days after the Saeima meeting, they ceased to be in force (Leber 2000).

V. Blūzma points out that even though referendum decisions were more significant than decisions of the Saeima, it is extremely difficult to ensure a successful referendum in practice. All four referendums held during the pre-war period ended without any result because the quorum for voting was not achieved. Consequently, in reality, the supreme legislative power was exercised only by the Saeima. Disrupting the balance of power in favour of the legislative branch destabilized the executive. The majority of the Saeima, without worrying about their own fate, could decide on the expression of no confidence in the government. Therefore, frequent government crises were characteristic of Latvia. During the pre-war period, 13 Cabinets were formed during the four
sessions of the Saeima. Even after the restoration of Latvia’s independence, this feature has been present in mutual relations between the state powers (Leber 2000).

As stated by Adolf Schild (1993), in the book “Pirmā Republika esejas par Latvijas valsti [The First Republic Essays on the State of Latvia]” it was evident that 13 Cabinet of Ministers or governments had changed in the first ten years of the country’s existence. It was not uncommon for European countries, and Latvia with frequent changes to its governments was not at the forefront among other countries. Karl Ulmanis was the head of five governments, Zigurd Meierovics headed two governments during this 10 year period and Janis Pauļuks, Voldemārs Zamulds, Hugo Celmins, Arthur Alberings, Margher Skujenieks and Peter Jurazevsky served as Prime Ministers once. In addition, there were 87 ministers, 11 ministerial colleagues with voting rights and 3 state auditors. By 1st July 1928, the government had held 1177 sessions. At that time, the government had issued 715 regulations with the force of law.

The power of local governments was also not reflected in the Satversme (one article on municipalities, which stipulated that “cities, towns and rural societies have the right of a local government in the law to a certain extent” was included in the unapproved Part 2 of the Satversme draft law) (Leber Red., 2000).

V. Bluzma (2000) concludes that on the whole in spite of the imperfections in terms of content and codification techniques, the Latvian Constitution was able to become a reliable legal basis for a democratic parliamentary republic. The restoration of Independence of the Republic of Latvia on the basis of the 1922 Constitution basically demonstrates its high social prestige and its ability to ensure successful functioning.

On June 20, 1922, the LSS adopted the Law “On the Enactment and Implementation of the Satversme of the Republic of Latvia”. Turning to the legislation in the field of administrative law, it should be emphasized that during the period of construction of the new state it was necessary to adopt a greater number of normative acts in this field of law in order to facilitate the establishment of the state apparatus and local governments and the normal harmonious operation. Speaking about the formation of the Latvian civil service, it should be noted that the Law “On Civil Service” (March 31, 1920), issued by the PV, which stipulated the classification of civil servants in five classes (the Government regulations issued on May 13, 1921 “On the classification of persons in civil service into categories of posts”, LKr, 28th May 1921, No. 10, 100), the civil service was divided into 20 service categories). The law discouraged nepotism, barring the appointment of civil servants who were closer than third level relatives or second level in laws to their immediate superiors in the institution. Officials were prohibited from direct or indirect participation in profit-making activities, where private interests would be in conflict with the interest of public authorities (Bluzma 2000).

As pointed out by A. Lieber and I. Bischer in their commentaries in 1998 on the Chapter IV of the Satversme “Cabinet of Ministers”, the Cabinet of Ministers is a state government. It is the state executive body that carries out political administrative functions (“executive power”). The Cabinet is legally separated from the parliament and from the third power of the state - the courts. The government’s actions directly affect the daily lives of citizens and their interests. If the Cabinet of Ministers adopts unpopular decisions and the real achievements do not conform to its declaration, the people immediately criticize the government. This is also facilitated by mass media that pay special attention to the activities of government officials. As a result, the government is subject to a wide-ranging debate (“visibility”). It is politically important that a mechanism be set up so that the people can legitimately and efficiently express its attitude towards the government and if necessary change the government. In a democratic republic, this task is carried out by the parliament elected by the people to which the government is responsible. The parliament is entitled to recall the government by expressing distrust (see Article 59 of the Satversme) (Leber, Bisher 1998).

It is important to point out that during the parliamentary period from 1918 to 1934 the Cabinet of Ministers was also regulated by the 1925 Law on the Cabinet of Ministers and the instructions issued in 1925 regarding the relations between the Cabinet of Ministers and the Saeima on the basis of this Law were determined by the 1923 and 1929 Saeima rules of procedure.
A. Lieber and I. Bischer conclude that the system of Latvian parliamentary government from 1918 to 1934 generally justified and performed its functions successfully. However, it had several shortcomings that directly affected the work of the Cabinet of Ministers. Significant drawbacks were as follows (Leber, Bischer 1998):

1) The Election Law caused the fragmentation of the Saeima in many of its functions. In practice, this meant that the formation of the government was difficult and managed often only after ugly “horse trading” among potential coalition partners (refer: Article 56, section 27 of the Satversme).

2) The Satversme did not stipulate any barriers for the dissolution of the government. The expression of no confidence was not subject to any political conditions and did not require a qualified majority. It was an easily manipulated instrument in the hands of the opposition parties, (refer Article 59, section 4 of the Satversme). During the four Saeimas (1922–1934), Latvia had 13 governments, whose “life” on average was only 10 months.

3) The instability of the government was facilitated by the ineffective dissolution mechanism of the Saeima. The decision to propose the dissolution of the parliament could be taken by the President, but he thereby risked losing his office (Articles 48 and 50 of the Satversme). During the period of all the first four Saeimas, the President had never used his right to propose the dissolution of the Saeima. Therefore, citizens were restricted in directly expressing their views on the conflict between the Saeima and the government.

4) The Article 81 of the Satversme empowered the government to issue regulations with the force of law “if urgent need so requires”. The government used this right too widely, thus compromising the constitutional mechanism.

A. Lieber and I. Bischer in 1998 stated that the experience of the last 50 years in the Western democracies showed that these deficiencies can be eliminated (Lēbers, Bišers 1998):

1) The fragmentation of the Parliament could be prevented by foreseeing “thresholds” in electoral laws to regulate inclusion of parties in the parliament. After the restoration of the Latvian state, this was implemented by introducing a 4 % threshold of the total number of votes. This was determined by the 1992 election law. In the 1995 election law, the threshold was raised to 5 percent.

2) The possibility to dismiss the government could be restricted by combining parliamentary vote of no confidence with the obligation to simultaneously elect a new Prime Minister. This instrument is called “constructive expression of no confidence” (see Article 59 of the Satversme, Section 17). Such an amendment has so far not been implemented in Latvia or has not even been proposed.

3) To more strictly restrict the ability of the government to pass normative acts with the force of law (such activity on a wide range of legislative enactments as seen currently in Latvia has not been observed in other democratic European countries).

3. Authoritarian period (1934–1940)

The authoritarian regime in Latvia can be linked to Kārlis Ulmanis, who performed the functions of the Prime Minister several times (1918–1921, 1925–1926, 1931 and 1934). K. Ulmanis’ views on the necessity to create a presidential mechanism was based on his experience of the Saeima. Therefore, K. Ulmanis’ Party (Farmers’ Union) submitted a draft amendment to the Satversme in 1933. Those amendments were only reviewed in two readings. Without waiting for the third reading, K. Ulmanis decided to unconstitutionally take power (refer Article 59 of the Satversme, Section 17). Two months after being elected Prime Minister, K. Ulmanis organized a coup on May 15, 1934 and declared a state of war (refer Article 62 of the Satversme, Section 42). Three days after the coup, the government announced retroactively that “the functions of the Saeima shall be carried out by the Cabinet of Ministers as of 23.00 hours, May 15, 1934 till the implementation of Constitutional reforms”. Thereby, the putschists (coup leaders) in effect suspended the activities of the Saeima under the Article 2 of the Satversme. The Cabinet of Ministers mandated the Minister of the Interior to suspend the activities of political parties that were considered to be “detrimental”. In fact, all parties were dissolved, including the Farmers’ Union led by K. Ulmanis (Leber, Bischer 1998).

The 1934 coup meant that the idea of a unified state power came into existence instead of the principle of separation of power. Consequently, Latvia lost its parliamentary mechanism and became an authoritarian state.
Certain citizens’ rights and freedoms were also restricted. However, after the coup, courts continued to operate in general, independent of the executive branch. Therefore, it is not correct to assert that Latvia ceased to exist as a state of law following the coup of 1934 (Leber, Bischer 1998).

Following the accession of Latvia into the Soviet Union, the 1936 Stalin Constitution of the USSR began functioning in Latvia. Consequently the “People’s Saeima” was formed by the Soviet government and the Constitution of the Latvian Soviet Socialist Republic was adopted on August 24, 1940. The activities of the Council of Ministers were regulated by this constitution. In 1977 the constitution of the new USSR, proclaimed by Leonid Brezhnev, came into force. Consequently, the legislative acts of the Council of Ministers were replaced by a new generation of rules. Among them were the 1978 Latvian SSR Constitution and the 1978 Law “On the Council of Ministers”. These acts were in force until the restoration of the Republic of Latvia (Leber, Bischer 1998).

4. Renewed Latvia (from 4th May 1990)

4.1. Public administration reforms

Public administration reform issues became topical immediately after the restoration of independence of the Republic of Latvia. A systematic reform of public administration was initiated in 1993 when the Law on Cabinet of Ministers was restored, the Law on Civil Service was adopted, and the Ministry of National Reform, the School of Public Administration and the State Civil Service Board were established.

In 1995, the concept of Latvian public administration reform was adopted, and in general during the fifth Saeima, the reform was a priority. On March 10, 1998, the Cabinet of Ministers approved the implementation plan for Development Strategy for the Public Administration Reform, 2000, where one of the priority areas was the restructuring of the institutional system of the sector with the aim of organising the sector in accordance with the strategic tasks of the government.


The Strategy for Public Administration Reform 2001–2006 and its implementation plan for unified reform was adopted in 2001. The implementation of the strategy and its plan was supervised by the Public Administration Reform Council, which was a consultative body and consisted of representatives of non-governmental organizations, entrepreneurs, universities, courts, municipalities, Saeima and public administration institutions. At the end of the planning period, an informative report “On the Implementation of Public Administration Reform Strategy 2001–2006 and action plan for the implementation of the Public Administration Reform Strategy 2001–2006” was approved by the Cabinet of Ministers.

Since 2003, the State Chancellery of the Republic of Latvia is responsible for the formation of public administration policy. Political responsibility in this area was transferred to the Prime Minister, shifting the focus on development of public administration policy to the government. The State Reform Division was established in the Policy Coordination Department of the State Chancellery, which took over the issues related to the development and coordination of public administration policy, but the development and coordination of local government policy was transferred to the Ministry for Regional Development and Local Government Affairs.

The further course of public administration policy included the Cabinet of Ministers Regulations No.501 of 17th July 2007 “Amendments to the Cabinet of Ministers regulation No. 372 of 8th July 2003 ”Regulations of the State Administrative Reform Council” “, amending the name of the Public Administration Reform Council and renaming it as the Public Administration Policy Development Council. Thus, the planning of public administration policy shifted its focus from the reform of the system to its development - with increasing emphasis on issues of quality, efficiency and better governance.
In May 2008, the guidelines for the development of public administration “Guidelines for Development of the Public Administration Policy for 2008–2013. Better Governance: Administration Quality and Efficiency” were approved. A working group was formed with representatives of ministries and non-governmental organizations. The purpose of these guidelines was to create a legal, efficient and high-quality public administration that provides public administration services in accordance with the needs of society. The implementation of the guidelines was significantly affected by the economic crisis experienced during the program period, which delayed many of the objectives of the guidelines and their implementation and as a result the assessment of the guidelines concluded that it was more a mid-term (midterm) assessment rather than an ex-post assessment. At the same time, when implementing the guidelines set out therein, the country experienced an economic crisis, paving the way for “structural reforms” in public administration as well. Consequently, in accordance with the Cabinet of Ministers Decree No.483 of 22nd July 2009, the “Planned measures for optimization of the Public administration system and Civil service” was approved. Thus, since 2001, the government has undergone a course of reform-development-structural reform.

Within the last planning period, institutions responsible for public administration policy have changed. In 2009, under the influence of the economic crisis, reforms were carried out in the central state administration, dissolving the Secretariat of the Special Assignments Minister for Electronic Government Affairs, the Secretariat of the Special Assignments Minister for Social Integration and the Ministry of Regional Development and Local Government Affairs. As a result, functions related to public administration policy (e-government, development of public services, development of civil society, etc.) were transferred to the newly established Ministry of Environmental Protection and Regional Development, Ministry of Culture, etc. Similarly by separating development planning functions, the Cross-Sectoral Coordination Centre (hereinafter – CSCC) – the leading institution in national development planning and coordination – was established under the direct authority of the Prime Minister on 1st December 2011. CSCC carries out monitoring of cross-sectoral policies, drafts medium-term and long-term planning documents and monitors their implementation, as well as coordinates declarations on the planned activities of the Cabinet of Ministers and the implementation of the Government’s action plan. In turn, the Policy Coordination Department in the State Chancellery was liquidated and the Department of Public Administration Development (initially the Department of Strategic Analysis) was established.

Starting from 9th February, 2016, the Department For Public Administration Policy of the State Chancellery is responsible for the formation of public administration policy, which consists of two divisions – Change Management Division and the Human Resources of Public Administration Division.

The main medium-term development planning document in Latvia is “National Development Plan of Latvia for 2014–2020” (hereinafter – NDP2020). This is an action plan for sustainable development of Latvia until 2030 (hereinafter – Latvia 2030), which should serve as a medium-term development roadmap for the state. On the one hand, the NDP2020 is a national “business plan” that shows the country’s growth model – where to invest to ensure economic self-sufficiency, productivity growth and country’s competitiveness? How will synergy be achieved between investment objectives and balanced development? How will the state profit, and how can the people do it? Likewise, the NAP2020 can also be seen as a “public contract” – which the state is committed to accomplishing / reaching by 2020 and what it expects from the public. The State offers a common vision of medium-term development to ensure long-term predictability in cross-sectoral decision making, business and individuals (Cross-Sectoral Coordination Centre, 2016).

Public administration is a complex, in fact the most complex public mechanism. It is the most complex of all the three branches of power: the legislature, the executive branch, the judiciary. Administration is characterized by its subordination to specific goals, determined by the legislator. Since the goals of the society (political) included in the laws keep changing constantly public administration, which is an instrument for achieving these goals, must constantly change along with it. This means that institutional structures of public administration must be constantly established, eliminated, reorganized; new procedures must be established or existing procedures must be amended to achieve the goals set out in constantly changing laws. Therefore, public administration has to be constantly reformed. It is necessary to create a mechanism that constantly checks, evaluates...
and reforms public administration. The key to public administration is “efficiency”, but so far it has only been successfully achieved on paper, even when Latvia has all the basic principles of a rule of the law state.

When assessing from the financial perspective, it should be borne in mind that the maintenance of public administration is more expensive for small countries than for large countries. Regardless of the size of the state, each country has to accept the same quantity and quality of laws and comply with it as well. The Law on the State Administration Structure came into force in Latvia in 2003. It created the best possible public administration structure and set the basic principles of its operation. One of the goals of the State Administration Structure Law is the provision of efficient public administration, and this term is used more than ten times in the law. The concept of the law states: “The rationale behind this concept would be to create instruments at the disposal of the state in order to reduce ... the administrative weaknesses ... and to highlight and strengthen the constitutionally defined framework for the functioning of public administration in a democratic state”. Many years have passed, and during this time more than once there has been talk of reforming public administration. In particular, these speeches have become louder in the context of the economic crisis. It has led us to think and discuss, but often these discussions are at a primitive level and are limited to the question of the liquidation of a state institution (Litvins 2010), referring to it as structural reforms.

4.2. Structural reforms

In recent times, the concept of structural reforms has become more mentioned in the context of attempts to ensure sustainability of public expenditure. Regardless of the fact how fed up we are with the term, it is still an important in improving the country’s welfare, and it is therefore important to understand what structural reforms are and what they mean today in Latvia. It seems that the greatest confusion in people arises, due to its frequent use in the media of the term in association with current budget “cuts” and equating the term to it. It is true that, the first step on the road to more efficient management is often giving up irrelevant expenses or expenditures, which the state or, for example, a company cannot afford. Unfortunately, austerity measures do not always mean sustainable, thoughtful reforms, points out Guntis Kalnins, Economist of the Bank of Latvia (Kalnins 2011).

To answer the question, one should first agree on what the term itself means. Mārtiņš Bitāns (2011), an economist at the Bank of Latvia, offers the following vision: structural reforms are the restructuring of a system in order to obtain better results, better return on investment of time, people and money. Such restructuring may be necessary for public administration as well as in sectors (education, medicine), in particular institutions, enterprises and, ultimately, in households - in the latter case, we usually call it otherwise. With regard to overcoming the crisis, establishing a sustainable economy, the recovery and increase of the country’s competitiveness, we are most likely to come across the need for structural reforms in the public sector and state financed sectors, since the objective is to the goal oriented efficient use of dwindling budget resources after a period of overheated economy. In this context, structural reforms can include reforms in the organization of state institutions, changes in the functions of the public sector (education, health, social system, security etc.), redistribution of funds among these functions, transfer of functions to the private sector. Consequently, structural reforms are closely linked to the macroeconomic situation in the country – without high-quality structural reforms in public administration, neither sustainable national fiscal development nor sustainable growth of welfare level in Latvia in the longer term is possible.

The government can influence the competitiveness of the state primarily through the establishment of cost-efficient public administration and the provision of efficient public services. In addition, divesting state functions of services that could be provided by the private sector reduces public sector intervention in the economy, optimizes the allocation of resources and, in the long run, reduces the tax burden on its inhabitants and entrepreneurs. Structural reforms make the economy more competitive and more flexible against potential shocks. In recent years in Latvia, in practice, while balancing budget expenditures and revenues, the Ministry of Finance often had to demand a certain amount of savings from sectoral ministries. Based on this demand, the task of the sectoral ministries has been to find sources of savings, while at the same time striving for structural change,
which would also ensure the more efficient delivery of public services in the future. Of course, the sectoral ministries are better aware of the situation in the sector than the Ministry of Finance, but this does not mean that they are definitely capable of creating and implementing long-term reforms, because the structure of ministries is organised to serve a completely different purpose - maintenance of the existing system. Thus, it has to be concluded that the reform process in Latvia has not been complete, often subjecting reforms to the short-term objective of budget savings and entrusting its implementation to the ministries themselves (Kalnins 2011).

4.3. Administrative law functions

As J. Naciscionis stated in the book “Administrative Law” issued in 2009, administrative functions can be divided as follows: The first administrative law function is to enforce the relevant laws of the Republic of Latvia as determined by legal sources. The Europeanization of administrative law has evolved very far and there is no subject of regulation that is not be regulated by European law. Only those that know these regulations can affect their content.

The second function of administrative law is to manage, regulate relations, for example, between a minister and a municipality (derived public person) or between two municipalities (derived public persons).

The third function of administrative law is to determine, regulate relations between public administration institutions and private individuals or other participants involved in administrative legal relationships, such as non-governmental organizations. However, here, attention is drawn to the fact that, alongside regulatory action, administrative law enforcement functions are identified. Regulations as a “tool” for management. Regulations as a phenomenon to guide the actions of participants in administrative legal relationships.

All functions of the state are equally important and all functions of the state are handed over to public administration for their execution (implementation) (Načisčionis 2009).

The state has some basic functions that it cannot refuse to perform. Otherwise, the question arises whether it is still a country. However, discussions need to be held and political decisions need to be taken regarding the remaining functions. If discussions lead to the conclusion that the state has to perform some functions but at present lacks the financial resources, it should not liquidate the institution carrying out the function. When the economic situation improves, then it is necessary to return to the full implementation of these functions. Reestablishing the institution and restoring human resources to fulfill this function will be more expensive and harder. In addition, complete liquidation would be a waste of civil servants as efficient civil servants are state resources. Therefore, during the transitional phase (economic crises are cyclical) the performance of certain functions should only be temporarily suspended or partially provided (Litvins 2010).

Public administration institutions have taken significant steps to facilitate the centralization of functions. Also in public procurement, financial resources could be saved if procurement were centralized. Currently, quite a lot of procurement in Latvia are made individually by institutions thereby leading to procurement commissions and wasting administrative and time resources. Due to the lack of experience and knowledge of purchasers procurement procedures are not timely planned, their preparation process is inefficient, as a result of which procurement contracts are delayed. Homogenous procurement is still fragmented leading to different levels of prices for similar goods and services that have an impact on the efficient use of budget funds. The state, local governments and institutions should constantly be on the look for ways to ensure the efficient use of financial resources.

The Ministry of Economics has centralized a number of support functions at the departmental level, thereby ensuring accounting, personnel records and information technology services to several subordinate institutions. The Ministry of the Interior has centralized internal audit functions at the departmental level. The Ministry of Education and Science also ensures personnel management functions for heads of institutions, as well as performs partial procurement for subordinate institutions.
4.4. Structural reforms in public administration

Ministries are central public administration institutions. For many years, there has been a long standing debate on reducing the number of ministries. Egils Levits, while presenting a report at the Latvian Academy of Sciences in 2010, criticized the process and emphasized that reduction of the number of ministries would not affect public administration. This would, however, have an impact on the decision-making process. Reducing the number of ministries cannot be an end in itself. In comparison with other parliamentary republics, the number of ministries in Latvia is below the average. The discussion should not be on the formal liquidation of ministries, but whether the sector is to be developed at the governmental level. The Cabinet of Ministers implements several policy directions and ministries reflect the priorities of the political forces in power. For example, in France there is the Ministry of Future, which does not have its own administration, however, the ruling party has recognized this priority as important. Egils Levits points out that the decision on the number of ministries is a political decision, and mentioned the Ministry of State Reforms at the beginning of the nineties as a positive example. Its task was to assess the situation and carry out public administration reforms. Its liquidation also was a mistake because the public administration needs to be reformed all the time. The Law on the State Administration Structure contains the principle of self enhancement (Litvins 2010).

In recent years there has been a reorganization of several ministries, for example, with the Cabinet of Ministers decree No. 726 “On optimization of functions and redistribution of financial resources between the Ministry of Health and the Ministry of Agriculture”, the Ministry of Agriculture had to take over the rights and obligations of the Ministry of Health for the registration of veterinary medical products, the assessment of the conformity of production and wholesale network to standards and licensing of veterinary pharmaceutical operations from the 1st January 2011.

The Ministry for Regional Development and Local Governments was liquidated and merged with the Ministry of the Environment by 31st December 2010 by Cabinet decree No. 676 “On ensuring the liquidation of the Ministry for Regional Development and Local Government” in order to ensure the improvement of the institutional system of the public administration and operational efficiency in accordance with Article 15, Paragraph four, Clause 1 of the State Administration Structure Law.

Merging two of the many ministries in the country is neither wrong nor to be condemned. Even quite the opposite. A country with a “de facto” population of two million people has to after all realize that it could but afford a small but efficient public administration that would in no way be associated with more than 10 ministers, including preferably the Prime Minister. The essence of the question is not in the number of ministers, but in a rational and efficient distribution of functions of the state (Kucinskis 2011).

Conclusions

The enhancement of the public administration in Latvia is one of the elements of a law-governed state. The paper highlighted the main problems in organizing public administration, but they are certainly not the only ones. The Law on State Administration Structure provides the necessary framework for the establishment of an efficient public administration. Nevertheless, discussions on structural reforms in Latvia and their progress sooner or later begin to usher a sense of hopelessness in people with weak nervous systems. On the one hand, there are people with ideas and vision on what should be changed and improved in the current public administration. On the other hand, these new ideas are not usually implemented in practice. Many good and valuable theoretical ideas have remained just ideas because their methods of implementation have been incorrect.

In order to successfully carry out reforms in a particular field, it is not just enough to have a vision of what needs to be changed, but to significantly change the way the reforms themselves are implemented. Of course, no one can give one hundred percent guarantee of success.

The judicial system can be stable and long lasting by making corrections from time to time, but public admini-
Administration reforms need to be carried out continuously. Public administration must respond to current events, new challenges, legislative and social changes. There should be an institution that independently manages this response and carries out public administration reforms. It cannot be entrusted to the heads of the institutions themselves, because public administration has a certain self-preservation instinct.

One of the most important priorities for state administration was the accession of Latvia to the Organization for Economic Co-operation and Development (OECD), which would promote the development of the quality of public administration and the provision of better public services to the people of our country, using the experience of other economically developed nations. Latvia officially became the 35th OECD Member State on 1 July 2016.

The significance and influence of decisions for Latvia on the development of the state at such a decisive moment will be assessed by economists, sociologists, historians and the media, who already have much to say. However, the real solution will be to answer the question: will Latvia, a country hit hardest by the crisis in the European Union, in the foreseeable future, become a country with a successful and modern economy, an educated society, a highly skilled workforce, and a place where the world’s most successful companies would be looking to invest.

References


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ASSESSMENT OF REASONS FOR BEING ENGAGED IN CLUSTERS IN TERMS OF SUSTAINABLE DEVELOPMENT

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Abstract. In terms of sustainable development, various forms of partnership are an important prerequisite for the development of companies, especially small and medium-sized enterprises (SMEs). Clusters are considered to be an effective form of support and innovation development for SMEs. Thus, enterprises working as a part of clusters are more efficient, flexible and resistant to external influences than large and hierarchical organizations. Clusters often arise spontaneously through the activities of local stakeholders who want to benefit from the synergy of the factors in the region, such as the existence of suppliers and customers, skilled labour force, specific resources and infrastructure. There are more than 20 clusters operating in the Slovak Republic. The majority of cluster members are SMEs. SMEs have many specificities and their engagement with clusters is influenced by various factors. For instance, many SMEs are often not sufficiently innovative or find it difficult to implement the results of their research and development into practical and successful innovation in the market. Bearing in mind the conditions of sustainable development, the authors examined the reasons why SMEs got engaged with clusters and enhanced their further development in terms of competitiveness. Moreover, the authors placed emphasis on their ability to innovate their products, technologies and/or services. Attention was also paid to the increased number of joint projects in the field of business, new market placement options and access to new information, as well as the acquisition of new partners, and employment growth in the regions in which these enterprises operate. The purpose of the paper was to identify the most relevant reasons why SMEs engaged with clusters in terms of sustainable development. In order to achieve this purpose, an empirical study was carried out. The results were evaluated by quantitative tools of statistics (percentage, average values, standard deviation, chi-square test and Cramér’s V). The results showed that the most important reasons that made SMEs engage with clusters were entry to new markets and getting new partners.

Keywords: small and medium-sized enterprises; development activities; clusters; cooperation; partnerships


JEL Codes: K1, K14, F52

1. Introduction

In the context of sustainable development, SMEs are considered to be the backbone of the EU economies. SMEs are mainly seen as a driving force of economic growth, increase of employment and productivity, and new jobs creation (Mynarzova et al., 2016; Lemanska-Majdzik, 2016; Caha, 2017; Orlova et al., 2018).

Empirical studies show that SMEs tend to grow faster than their larger counterparts (e.g. Fiala, Hedija, 2015)
in order to achieve minimum efficiency of scale production (Teruel-Carrizosa, 2010; Zitkiene, Dude, 2018; Benešová et al. 2018).

They, however, are associated with some disadvantages in comparison with large companies. They are mainly those related to their connection to new markets, access to the results of R&D, innovation, lower financial power, limited opportunities for recruiting and employing professionals, limited resources for promotion and advertising, limited opportunities to gain benefits from the scale of production and others (Belás et al., 2014; Krajnakova, et al., 2015; Ivanova, 2017; Vlaseckova, Mura, 2017; Praise, Atari, 2017; Fomina et al. 2018; Žižka et al., 2018; Narkunienė, Ulbinaitė, 2018).

One of the possibilities to minimize the disadvantages mentioned is to involve SMEs into various forms of network cooperation. At present, it is primarily the clusters that are considered to be one of the options for increasing business and innovation performance as well as the competitiveness of SMEs in terms of sustainable development. Efficiently working clusters represent a fast growing business also for SMEs, and create better opportunities for them to develop new sustainable business opportunities through collaboration projects. Suh&Lee (2018) claim that changes in environment make SMEs analyse, build, and reconfigure their resources and organizational capabilities in order to achieve flexibility and agility from the perspective of sustainability. Modern cluster theory provides reasons for positive externalities that may arise from the group of interaction of close businesses that operate in common and related areas of economic activities (Kosfeld, Titze, 2015). In the literature, there is a discussion regarding horizontal co-operation between small and medium-sized enterprises, whereby individual competitors are to be managed because of the increasing resources and innovations demand, leading to enhanced competitiveness through joint products development. (McAdam et al., 2014). Being involved in cluster cooperation brings to SMEs, in particular, the ability to keep competitiveness at regional, international and global levels (Morosini, 2004; Yang, Černevičiūtė, 2017; Batkovskiy et al. 2018).

Therefore, cluster initiatives and their implementation have become one of the key directions in economic support to SMEs in regions. However, the implementation of innovation activities by SMEs and the search for suitable forms of cooperation, such as the establishment of clusters in terms of economic development in Slovakia, are facing several problems. They include a lack of information about the significance of clustering among SMEs, limited financial and human resources, lack of trust to other cluster members, and lack of motivation for clustering, etc. Therefore, a comprehensive analysis of issues, such as innovative experience implementation, adequate forms of cooperation and especially innovative cluster creation is necessary. The findings from such analyses should be made available to cluster policy makers and experts in order to develop initiatives and strategies that would support SMEs in facing global challenges.

The purpose of this paper is to identify the most relevant reasons of SMEs to get engaged with clusters in terms of sustainable development. To achieve this purpose, questionnaire survey data were used. The Pearson chi-square test was employed as a statistical method to find whether there is a significant relationship between the size of enterprises and the significance of selected reasons. Next, Cramér’s V was used to identify the strengths of association.

2. Literature review

The cluster concept was initiated and popularized by Michael Porter (1990). He explained that clusters have long been part of the economic landscape, with geographic concentrations of trades and companies in particular industries dating back for centuries (Porter, 2000). According to Porter (2000), a cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. This definition and set of features of the term was elaborated in works of many other authors. Foghani et al. (2017) state that cluster is utilized to show the geographical and a sectoral focus of firms which produce and sell a range of related or complementary goods and services, and normally experience the same challenges as well as opportunities. A cluster forms an ideal platform for knowledge sharing so it ensures trust and cooperation that facilitates collective learning, synergies and smooth exchange of
knowledge (Gunawan et al., 2016). Clusters have, as a rule, a positive impact on their development, in particular, how to increase turnover savings, reduce costs, increase competitiveness, streamline the transfer of information or technologies, increase government investment, and so on. (Czechinvest, 2017). At the same time, the goal of an innovative cluster can be to gain innovation and investment into modern technologies and machinery equipment, regional innovation centre building, and innovative infrastructure development for entrepreneurs in terms of environmental impact and energy sources saving (Malakauskaite, Navickas, 2011; Kordos, Karbach, 2014; Navickas, Navikaitė, 2015; Mischenin et, 2018; Rogalev et al., 2018).

Most definitions of clusters include geographical proximity, relationship among cluster’s stakeholders, social ties among cluster’s stakeholders, synergy effects and benefits from cluster as a whole and also for its stakeholders and others (Porter, 1990, 1998; Dudian, 2011; Ramojus, 2016). Bylok et al (2016) provide four types of clusters’ definitions:

- 1st – cluster as an agglomeration (concentration) of mutually tied enterprises on a specific territory that are capable of synergetic processes where an important role is played by administration and local and regional authorities;
- 2nd – clusters as an industrial complex, namely the concentration of co-dependent enterprises on a specific area that operate in the same or related industrial sectors or services by which the mutual ties strive towards the improvement of competitiveness,
- 3rd – cluster as a hub of knowledge in which cooperation takes place between the research units and the enterprises with the aim of creation new knowledge and innovative solutions,
- 4th – cluster as a social network based on social relations, trust and social ties, sharing resources that facilitate cooperation and the creation of innovations.

The source of clusters’ competitive advantage can be analysed by Porter’s diamond model focused on particular microeconomic indicators of competitive advantage. However, the competitive advantage relies not only on individual elements of Porter’s model or individual companies, but also on the coherence of the so-called “diamond”. The Diamond of Competitive Advantage puts into context factors that affect the competitiveness of entities (nations, regions, sectors, clusters) (Porter, 1990). Important elements of input factors are human resources, raw materials, knowledge, capital and infrastructure, while specialized resources can vary depending on industry. Demand conditions create prerequisites for a competitive advantage in case of customer pressure to implement innovative activities. Related and supportive industries are an important part of the diamond, representing the ability for local companies to deliver cost-effective inputs and to participate in companies ‘innovation processes’ (SIEA, 2015). Government can influence all parts of the “diamond” by creating an appropriate competitive environment, as well as supporting the companies in their efforts to achieve growth and competitiveness enhancement. The role of government and local authorities at national or regional level should be to support the development of clusters as well as to increase their overall competitiveness (Czechinvest, 2017).

The present business environment in which clusters operate reflects a dynamic process in which clusters have to find effective ways to achieve the long-term development. As Bembenek (2015) states, considerable challenge within this scope is the implementation of sustainable development concept assumptions. The concept of business sustainable development, including clusters, is a significant element of the EU economic policy, comprised in the priorities of the strategy “Europe 2020”. This new strategy assumes, among others, that cluster members and coordinators have to show complete understanding of sustainable development concept and its practical usage to the degree that ensures to meet the requirements of market and environment. Authors focused on cluster research, elaborate their issues also in the context of sustainable development from several points of view. In literature, we can find works focused on clusters’ benefit towards sustainable regional development (Knauseder, 2009, Mempel- Sniezyk, 2014), the sustainable development of clusters in the context of corporate social responsibility (Bem- benek, 2015), the role of clusters in sustainable development of enterprises (Suchacek et al., 2018) and others.

In terms of sustainable development, clusters include various stakeholders, such as suppliers of specialized inputs, providers of specialized infrastructure, manufacturers of complementary products or companies related
by skills, technologies, or common inputs, governmental and other institutions, trade associations and other collective bodies involving cluster members, foreign firms, secondary schools and universities as well as SMEs.

SMEs are involved in clusters as the stakeholders that have the potential for their successful integration into productivity growth and global distribution networks (Foghani, et al., 2017; Damaskopoulos, et al., 2008). The experience from cluster cooperation indicated that SMEs start cluster cooperation as it is mutually advantageous. In SMEs, this form of cooperation is mostly implemented where businesses are bound by the creation of a competitively interesting product, its individual parts or technological chain (Hämäläinen, et al., 2011). In localities or regions where the industrial structure is organized around one or more large manufacturing companies, the most effective cluster-building practices of SMEs depend on the position of firms in supply or sales chains (Atienza, et al., 2016). In this case, enterprises cooperate to achieve one common goal, which increases their competitiveness and overall economic performance (Šúbertová, et al, 2014).

Globalization has profoundly changed the reasons why SMEs engage with clusters. Nevertheless, the impact of clusters on competition under ever-increasing globalization and the development of knowledge-based economies is getting bigger. The cluster cooperation of SMEs represents a new way of thinking about national, state and local economic interests and puts new demands on society, government and regional authority institutions to increase the competitiveness and economic performance of manufacturing enterprises (Porter, 2000).

Traditional reasons for SMEs to get engaged with clusters, such as employment growth, cost cuts, better marketing and promotional activities, entry to new markets or getting new business contacts etc. are still relevant. At the same time, new reasons for enterprises to get engaged with clusters have emerged, such as obtaining new information, implementing innovations and carrying out joint projects, etc. For example, by examining a sample of 444 SMEs involved in cluster collaboration it has been revealed that their performance within the cluster is motivated by successful deployment of dynamic organizational structures (Rice, et al., 2013; Strunz, Vojtovič, 2014).

Moreover, another study highlights that the competition among cluster enterprises can negatively affect the exchange of information, because each of one among them wants to use it separately (Sordi, 2012). And the implementation processes of advanced information and communication technologies into SMEs indicate that these technologies are getting them closer in the phases of development and training and give a stimulus to sustained and long-lasting forms of cluster cooperation development (Berranger, Meldrum, 2000).

Based on the study on reasons for the involvement of 300 SMEs in cluster cooperation, Sato (2000) proposed a successful case of SME clusters development in metallurgy industry and ironmongery. He came to the conclusion that the sub-supply chain being combined with high market diversification are the main reasons for SMEs to be involved in cluster cooperation. Similarly, the study of Atienza, et al. (2016) examining 351 SMEs also concluded that in regions where the industrial structure is organized around one or larger manufacturing companies, the best practices of SMEs depend on their status in technology and supply chain.

In the Ghanatabadi’s (2005) study a cluster cooperation of SMEs is considered as one of the development strategies and at the same time as an integration tool of individual economic regions, countries and continents. This means that the SMEs development is a very necessary prerequisite for their involvement in cluster cooperation. Similarly, for SMEs benefiting from an integrated support system and a wide range of business networks, their homeland is innovation (Ceglie, Dini, 1999).

3. The Research Methodology

In the study, the most relevant reasons why SMEs engaged with clusters were identified by using the method of structured interview. The interview was performed with SMEs top managers or other people who worked on the implementation of cluster activities. The structured interview questions were obtained from a previously performed pilot project in which 27 respondents were asked to list the reasons for enterprise involvement in cluster cooperation.
Entrepreneurs selected the reasons that are relevant for small and medium-sized enterprises to cooperate in clusters. They used a 5-level scale from 0 to 5 points (0 - irrelevant, 5 - most relevant).

Out of all SMEs operating in the Slovak Republic, a random sample of 317 small and medium-sized enterprises was made. However, only 250 SMEs were willing to participate in the structured interview.

The main characteristics of the sample were as follows: the size of SMEs by the number of people employed (1 to 9, 11 to 49 and 50 to 249) and by the annual turnover (not exceeding 2 million EUR, not exceeding 10 million EUR and not exceeding 50 million EUR) (Table 1).

Basically, the sample characteristics corresponded with the population characteristics (mainly with regard to the annual turnover of SMEs) which include all SMEs operating in the Slovak Republic. Anyway, the purpose of the research was not to make a statistically representative sample based on statistical units (respondents). In the structured interview, experts were interviewed. Thus, the sample representativeness is not necessary.

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<td>66</td>
<td>30</td>
<td>250</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>62</td>
<td>26</td>
<td>12</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own research

Of the total number of respondents, the largest part was comprised by enterprises employing up to 9 employees (36%), the next equally large group was represented by enterprises (35%) with a number of employees from 10 to 49 and the remaining 28% were enterprises with 50 to 249 employees. Regarding the annual turnover, 62% of enterprises were those with a turnover up to 2 million EUR. 26% of enterprises recorded an annual turnover not exceeding 10 million EUR and 12% of enterprises had an annual turnover not exceeding 50 million EUR.

To achieve the purpose of the study, the authors used empirical research methods (structured interview), statistical methods (chi-square test ($\chi^2$) and Cramér’s V) and Statistica software. A chi-square test was used to verify the null hypothesis (H0) regarding the relationship between two nominal variables. The observed counts ($f_{o}$) were compared to the expected counts ($f_{e}$).

Test statistic:

$$\chi^2 = \sum_{i=1}^{m} \sum_{j=1}^{n} \frac{(f_{o_{ij}} - f_{e_{ij}})^2}{f_{e_{ij}}} \quad (1)$$

In this paper, the test statistic $\chi^2$ was used to test the hypothesis at a level of significance of 0.05 about no association between the level of assessing the reason to enter clusters and the size category of the enterprise. The low level of p-value < 0.05 meant that H0 was rejected and an alternative hypothesis H1 was accepted. High level of p-value > 0.05 meant that the H0 was not rejected. It follows that there was a relationship between the level of assessing the reason and the size of enterprises.

To measure the dependence of pairs of variables, the Cramer’s V coefficient was used, which can achieve values from 0 to 1. Dependence less than 0.1 is trivial, 0.1-0.3 small, 0.3-0.5 medium and above 0.5 is great. If the value of the coefficient is closer to 1, the dependence between the two qualitative characters is stronger and vice versa (Budíková et al., 2010).
4. Results and discussion

Statistical indicators of respondents’ answers on the reasons for SMEs to be involved in cluster cooperation are given in Tab. 2. According to the mean values in selected assessed reasons, the respondents marked the most relevant reasons for cluster cooperation the following items: to get new contacts (3.41±0.90%) and to enter new markets (3.38±0.99%). The least relevant reason was to increase employment (2.3±1.40).

The results of standard deviation showed, that the reasons, such as to increase the number of innovations, to enter new markets, to access new information, to get new contacts, were assessed similarly by respondents. The assessment of the remaining reasons indicated that there was observed a more significant deviation from the mean.

<table>
<thead>
<tr>
<th>Reason</th>
<th>µ (mean)</th>
<th>σ (standard deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase employment</td>
<td>2.37</td>
<td>1.40</td>
</tr>
<tr>
<td>To increase the number of innovations</td>
<td>3.09</td>
<td>0.97</td>
</tr>
<tr>
<td>Common projects in business</td>
<td>3.12</td>
<td>1.08</td>
</tr>
<tr>
<td>To enter new markets</td>
<td>3.38</td>
<td>0.99</td>
</tr>
<tr>
<td>To increase competitiveness</td>
<td>3.09</td>
<td>1.14</td>
</tr>
<tr>
<td>Access to new information</td>
<td>3.28</td>
<td>0.95</td>
</tr>
<tr>
<td>To get new contacts</td>
<td>3.41</td>
<td>0.90</td>
</tr>
<tr>
<td>Cooperation to achieve cost-cuts</td>
<td>3.14</td>
<td>1.06</td>
</tr>
<tr>
<td>Better promotion and marketing</td>
<td>3.22</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Source: own research

In the following section of the paper, the results of the relationship between the variables under review are presented, where the first one is the level of assessment of reasons by respondents and the second one is the size category of an enterprise. Due to the failure to comply with the good approximation condition (at the expected abundance, their value was not at least in 80% of cases higher than 5), respondents’ answers were recalculated in case of assessing by levels of 4 and 5. Percentage of within respondents’ answers for this sum within the assessment of reasons is shown in Table 3. This assessment shows that the most relevant reasons for SMEs to be engaged in cluster cooperation are: “entry to new markets” (65.20%) and “getting new contacts” (62.80%). In the category of 0-9 employees, the most relevant reason for cluster cooperation was “getting new contacts” (22.40%). In the category of 10-49 employees, the most relevant reasons recorded were “common projects in business” (22.40%) and “entry to new markets” (22.40%). In the category of 50-249 employees, the most relevant reason was “entry to new markets” (22.40%). The least relevant reason mentioned by entrepreneurs in all three categories was the option of increasing employment (see Table 3).

<table>
<thead>
<tr>
<th>Reason</th>
<th>0-9</th>
<th>10-49</th>
<th>50-249</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase employment</td>
<td>7.60%</td>
<td>10.80%</td>
<td>9.20%</td>
<td>27.60%</td>
</tr>
<tr>
<td>To increase the number of innovations</td>
<td>14.40%</td>
<td>16.40%</td>
<td>13.20%</td>
<td>44.00%</td>
</tr>
<tr>
<td>Common projects in business</td>
<td>14.40%</td>
<td>22.40%</td>
<td>13.60%</td>
<td>50.40%</td>
</tr>
<tr>
<td>Entry to new markets</td>
<td>20.40%</td>
<td>22.40%</td>
<td>22.40%</td>
<td>65.20%</td>
</tr>
<tr>
<td>To increase competitiveness</td>
<td>18.00%</td>
<td>15.60%</td>
<td>16.40%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Access to new information</td>
<td>20.00%</td>
<td>17.20%</td>
<td>18.40%</td>
<td>55.60%</td>
</tr>
<tr>
<td>To get new contacts</td>
<td>22.40%</td>
<td>20.80%</td>
<td>19.60%</td>
<td>62.80%</td>
</tr>
<tr>
<td>Cooperation to achieve cost cuts</td>
<td>13.60%</td>
<td>21.20%</td>
<td>17.60%</td>
<td>52.40%</td>
</tr>
<tr>
<td>Better promotion and marketing</td>
<td>19.20%</td>
<td>20.00%</td>
<td>17.20%</td>
<td>56.40%</td>
</tr>
</tbody>
</table>

Source: own research
Table 4 shows the results of the χ² test, by which the following hypotheses were tested:

• H₀: There is no association between assessing the level of reasons to join the cluster cooperation and the size category of enterprises.

• H₁: There is an association between assessing the level of reasons to join the cluster cooperation and the size category of enterprises.

Table 4. The results of chi-square test (p-value)

<table>
<thead>
<tr>
<th>Reason</th>
<th>p-value</th>
<th>Cramér’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase employment</td>
<td>0.108143</td>
<td>0.10563</td>
</tr>
<tr>
<td>To increase the number of innovations</td>
<td>0.777885</td>
<td>0.64001</td>
</tr>
<tr>
<td>Common projects in business</td>
<td>0.076355</td>
<td>0.08018</td>
</tr>
<tr>
<td>Entry to new markets</td>
<td>0.014300</td>
<td>0.00356</td>
</tr>
<tr>
<td>To increase competitiveness</td>
<td>0.188723</td>
<td>0.06291</td>
</tr>
<tr>
<td>Access to new information</td>
<td>0.069197</td>
<td>0.08318</td>
</tr>
<tr>
<td>To get new contacts</td>
<td>0.685584</td>
<td>0.59642</td>
</tr>
<tr>
<td>Cooperation to achieve cost cuts</td>
<td>0.012982</td>
<td>0.00582</td>
</tr>
<tr>
<td>Better promotion and marketing</td>
<td>0.912835</td>
<td>0.90923</td>
</tr>
</tbody>
</table>

Source: own research

As it can be seen from Table 4, the level of p-value is higher than the probability level of 0.05 in most cases of the reasons under assessment. Thus, it can be inferred that there is no association between the business size category and the level of the reasons assessed. The null hypothesis is rejected in the entry to new markets and cooperation to achieve cost cuts. The results of Cramér’s V, however, showed only trivial dependence.

5. Conclusion

Several completed studies covered in the research showed the positive impact of the clusters in various ways on their stakeholders (Purwanto et al., 2015; Bylok, 2016; Gunawan et al., 2016; Foghani et al., 2017). The analysis performed was focused on the reasons why SMEs joined existing clusters. The results of the research revealed significant estimated benefits of being a part of clusters. The key advantages, as seen by the SMEs managers, were being able to enter new markets and get new contacts. It is evident that there are also other motives for SMEs engaging with clusters, such as better promotion and marketing, access to new information, cooperation to achieve cost cuts, common projects in business and competitiveness enhancement.

Without partner cooperation and without engaging with clusters, SMEs do not possess the economic and human potential to perform similar and mutually advantageous activities in terms of sustainable development. Nevertheless, further research will require to carry out a case study and interview in SMEs working in clusters.

Undoubtedly, when working in clusters, SMEs much more improve their bottom lines. However, the results of our survey indicated that in the Slovak republic as well as other Eastern European countries there are no extensive empirical surveys and collected statistical data that clearly confirm the positive impact of cluster cooperation on the development and progress of SMEs (see also Karaev, Koh, Szamosi, 2007; Filipishyna et al., 2018).

At the same time, no study has unequivocally demonstrated that being engaged with clusters leads to improved economic performance of SMEs in terms of sustainable development. The gap in exploring this issue also lies in the fact that the conducted surveys do not focus their attention on competition issues among clusters as well as within the individual members of cluster groups. At the same time, it would be necessary to identify the intensity of competition among companies that have decided to stay out of any particular group. Up to now, disadvantages of those SMEs that are not engaged in clusters have not been identified. Because of the lack of information on the linkage between clusters and competitiveness, especially from the point of view of SMEs as the key cluster players, it is necessary to address the competitiveness issue in more depth.
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THREATS TO THE COUNTRY’S SUSTAINABLE ECONOMIC DEVELOPMENT: A CASE STUDY

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Abstract. Our paper focuses on the threats to the global development and sustainable economic development of a country that might include economic, political, human development, as well as sustainable development issues and problems. Sustainable economic development might serve as a tool for fostering the country’s prosperity and helping it to overcome various threats that might stem from its geolocation, economic situation, natural resources, as well as many other internal and external factors that all play their decisive roles. The paper uses a case study of the United States as an example of the country vulnerable to a plethora of threats. It analyzes the most crucial threats one by one and classifies the most notorious and impending issues stemming from these threats that might hamper the economic growth and development. In particular, we focus on the issue of energy security and the renewable energy sources (RES) that represent an important aspect in this debate and research. Our results can be used by the policymakers as well as regional development managers for improving the security strategy.

Keywords: sustainability, economic development, political development, human development, threats, United States


JEL Classifications: FO2; O11; O19; P10

1. Introduction

Global development has been the focus of governments, international organizations, and other stakeholders across the world. However, despite the fact that there has been increased focus on national and international development, there still are challenges to the attainment of the desired development goals and objectives. In 2000, the different states of the United States ratified and collectively agreed to work towards the realization of the eight millennium development goals (MDGs); eradicate poverty, achieve universal primary education, promote gender equality, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria, and other disease, foster environmental sustainability, and develop global partnerships to support the achievement of these goals by the year 2015 (Stojanov et al. 2011; Sachs 2012; Niño-Amézquita et al. 2017). The lapse of the period was followed by the ratification and commitment to work towards the sustainable development goals (SDGs) starting from 2015, which according to Hák et al. (2016), are designed as a furtherance of the MDGs general agenda.

A scrutiny of the MDGs and the SDGs shows that the concept of development as constructed and used currently, goes over and above economic development to encompass other factors. According to Hill and Hult
conventionally, development was assessed premised on specific economic statistics, such as gross domestic product (GDP) and Gross National Income (GNI), but premised on the works of Kelley, development is now measured using somewhat wider criteria, the Human Development Index, that measures development on the basis of economic and other factors such as living standards, health, and human capability. Premised on the more holistic criteria for measuring development, it is possible for governments to formulate and implement policies that foster general or more holistic development. It is in the context of the widened scope of understanding of development, that this report will assess the key challenges that hinder development in specific developed and developing countries, such as the United States, China, Britain, and Haiti.

This paper focuses on the analysis of the threats to the sustainable economic development using a case study of the United States. It is organized as follows: Section 2 provides a comprehensive literature review. Section 3 provides a case study of the United States and scrutinizes the threats for its sustainable economic development stemming from the economic, political, as well as geopolitical factors. Section 4 provides discussions of the results. Section 5 concludes with some closing remarks and policy implications.

2. Literature review

As enumerated in the introduction, the scope of defining, assessing, and measuring development has expanded to include additional elements, in the human development index, over and above the conventional economic indicators that have been previously widely used. According to the United Nations Development Program (UNDP 2018), the human development index (HDI), in addition to economic indicators, includes different other factors, such as life expectancy, measured by life expectancy index; knowledge, measured by education index; and economic factors which indicate premised on the specific economic indicators, GNI and GDP among others, countries are ranked as either developed or developing countries, which will have or experience different types of challenges to development, depending on the country’s ranking and current performance and actions towards fostering development. Accordingly, considering that the HDI criterion is wider, the challenges that impede development, assessed from this perspective, in the different countries, will be more. The factors that could hinder development, when development is considered from a HDI perspective, can be categorized as political, economic, environmental or natural, and social factors, which in turn have implications on the other areas of an economy, and subsequently, development (Kalyugina et al. 2015; Vasylchak and Halachenko 2016; Cardoso et al., 2018; Rocha, Neves 2018; Ivanova, Latyshov 2018; Muniz et al. 2018; Monni et al. 2018; Mikhaylov 2018).

Political factors are quite broad, encompassing different aspects of the political administration of a country. According to Pye and Verba (2015), the politics of a country, and by extension, the administration and the ensuing policies formulated and implemented by each regime, to a large extent, have an impact on the other aspects of the society, such as economic, and social aspects of the society. In agreement, Acemoglu and Robinson (2006) opined that the political systems of a country, which determine the competition for and allocation and utilization of resources, have a greater impact on the other aspects of a country, and will therefore influence the realization of the development goals and objectives of a country. Considered in the context of international development, political factors would be understood from the perspective of increased competition between different countries in the clamor for supremacy in the global hegemonic order.

Evidently, political factors, as a hindrance to the attainment or realization of development goals, is very wide because it encompasses a wide range of factors, looking at it internally, within a country, it will include aspects such as the form of government, which could be autocratic or democratic, with commensurate effects on the attainment of the development agendas. As Escribá-Folch (2013) observes, normally, democratic political regimes provide a favourable environment for the pursuit and realization of development goals, while autocratic regimes are characterized by plunder and self-enrichment. As Koudelková et al. (2015) show, corruption might become a large and considerable obstacle within this context. From this perspective, it is evident that democracy supports development while autocracy is detrimental to the pursuit of human development, such as the eradication of poverty. For countries such as the United States and Britain, the political systems in place, mainly
democratic, have fostered the attainment of development from a HDI perspective, whereas for a country like China, with a weaker democracy, even though economic development is being realized, holistic development from a HDI perspective has not been achieved.

In addition, political factors influence other aspects of development from the HDI perspective such as education policies, social policies, and economic policies, demonstrating the far-reaching effects of political factors on the attainment of national and international development goals and objectives. Indeed, according to Johnston (2000), government policies, and specific actions, foster or restrict the attainment of development goals, such as policies, laws, and regulations for fighting corruption will promote development, whereas in a country where democracy prevails but there are not adequate measures to fight the vice, development will be curtailed. According to Acemoglu and Robinson (2006) government policies, an offshoot of the political systems in place will have far reaching effects in different spheres of the society that will affect or determine the levels of development achieved by a country. As such, apart from ensuring a favorable environment for development by ensuring stability and promoting the rights of the majority and equality, politics will also have an impact on the economic performance of a country.

Within the HDI as enumerated above, the standards of living, measured using the GNI index, is an important indicator of development (UNDP 2018). Indeed, according to Sachs (2012) a key component of development, as contained in the MDGs and in the SDGs, is eradication of poverty to promote decent working and living conditions for the populations. Economic instability will therefore be a major impediment to the attainment of development goals and objectives. According to Hák et al. (2016), unemployment rates, financial crisis and recession as was the case in 2008/2009, and economic disparities and inequalities are some of the key economic elements that are an impediment to the attainment of development goals and objectives in countries.

From this perspective, the United States, Britain, and China, as well as a developing country, such as Haiti, where the gap between the rich and the poor is continuously growing, there is a hindrance to the attainment of development goals and objectives. However, in developed countries, such as United States and Britain, where unemployment rates and poverty rates are lower, the extent of economic factors as an impediment to development, compared to developing countries such as Haiti, is not as extensive (Balaam and Dillman 2015). Other aspect of economic factors are trade and economic practices, such as protectionism and international trade conflicts, which are not in the spirit of global partnerships as envisioned as promoters of development in SDGs and MDGs, across countries ranked as developed or developing countries. As such, the extent to which economic factors promote or impede development from a HDI perspective will be limited in developing countries, compared to developed countries. However, while economic and political factors are very important, social and environmental factors will pose similar challenges. Other factors that are an impediment to the attainment of development goals and objectives are social and environmental factors that create the basis of the sustainable development strategy, especially in the national energy strategy (see e.g. Balitskiy et al. 2014; Lisin et al. 2015; Lisin et al. 2016; Štreimikienė et al. 2016; or Strielkowski and Lisin 2017; Tvaronavičienė 2018a; 2018b; Plenkina et al. 2018; Tvaronavičienė et al. 2018).

Social factors, according to Hill and Hult (2017) include factors such as demographic changes, and global and country-specific population growth, which have implications for international trade, and by extension growth and development. The global population, including in the United States, Britain, China, and other countries, such as Haiti, is continuously growing placing pressure on the environment because of increased competition for resources, posing a major impediment to development from different perspectives (Dell’Angelo et al. 2017). As such, social changes, such as enumerated above, population growth, will put pressure on the environment, which leads to environmental pollution and degradation, which contravenes the SDGs and MDGs as well as the HDI.

From another perspective, the environment, as a stand-alone factor, has different dimensions, one being resources endowment, and the other being natural disasters. In terms of resources endowment, the availability and use of natural resources, or lack of the same, could promote or hinder development, which is quite evident
in the United States, Britain, and China, which have been well endowed with different environmental resources but the depletion of the same, such as petroleum and other minerals, is threatening sustainable development (Nellemann et al. 2014). On the other hand, environmental calamities, such as cyclones, extended winters, and global warming, ensuing from human activities, and natural disasters, such as the recent volcanic activities in Haiti, collectively hinder or impede the realization of development goals and objectives.

3. Threats to a country: a case study of the United States

The United States of America is undoubtedly the most powerful country in the world. However, the beginning of 21st Century has seen the country witness myriads of challenges and threats. The challenges are basically economic and political. However, there are other aspects of challenges related to social issues. But, political and economic threats are the main concern as they pose serious risks to the most powerful economy and democracy (Seeorgel 2018). The emergence of China as an economic powerhouse and the insurgence of terrorism has seen America concerned and worry about the impending doom as some would call it. First, on the social and political domain, it is important to indicate that America is increasingly becoming a divided nation. Trump’s presidency has done little to reduce the widening gap between race, class and religion not to mention other social groupings such as LGBT. The politics of the country has changed, and polarization continues to rock the nation. On the global level, America is under threat of terrorism. The terror groups such as Isis and Talibban continue to pose a huge risk to the security of the nation (Seeorgel 2018). Moreover, the emergence of China as a superpower and its alliance with American adversaries such as Russia and North Korea only makes the equation more complicated for the nation. It is the right to argue that America is under intense threat both in terms of economic and political aspect. It is on this basis that this paper seeks to analyse the political and economic threats to the United States of America.

3.1. Economic threat to the United States

Public Debts

The rising public debt is one of the main threats to US economy. The inability of the federal government to keep its spending under control has only led to the piling of the public debt. The uncontrolled spending has led to enormous debt burden by the government. It is estimated that investors outside the United States have funded a quarter of the debt which is around $1.9 trillion (Bachmann & Gunneriusson 2013). The accrual of debts by the government caused by the deficit spending is a tax shift to future generation from the current generation. The same is true when the funds are used for the operational expenses that are used to finance public projects and operations. From the given information, it is evident that if the accruing debts are not controlled, then the future generations will likely suffer the consequences of the tax burned. The same will likely affect trade and investments as a huge portion of the revenue will be used to service the accruing debts.

Overseas military operations and trade war with the EU and China

There have been debates on whether or not China poses an economic threat to the United States. The truth is that China is indeed a threat to the US, especially with respect to economics. For a long time, the USA has remained world’s largest economy (Bachmann and Gunneriusson 2013). More than 140 years down the line, the United States has remained the largest economy, but things are changing with China emerging as the second largest economy and with the highest purchasing power. The country has overtaken the United States at least with respect to one dimension, and that is GDP based on the purchasing power parity. For example, in 2012/2013, the GDP growth rate of China was ahead of that of the United States. China also had around $1.5 trillion more than the US. Not to mention that China is a huge state with a population that is around five time that of the United States. The constant involvement in Wars on terror is also eating into the nation’s resources making it weaker with time.
Population power is another aspect of threat that China poses to the United States with regard to economy. According to 2013 population census, China population is 1.357 Billion while that of US is just 318.9 million (Ciuriak et al. 2017). The given disparity is an advantage to China, because in the event that the two countries come neck to neck, then China will not be easy to conquer. The huge population also means that China has an enormous purchasing power. The population is the same reason why India has left Pakistan and is inclining towards India because it can match China easily in terms of population (Sikuta 2008). The US considers India as the best tool to be used against China. However, the highlighted claim is anecdotal and is subject to debate and interpretation.

Finally, the veto power and the Russian support is another interesting aspect of economic threat that China poses to the United States. It is important to indicate that China, just like the United States has the veto power. The nation can use this power to influence its region or any other place in the world (Sikuta 2008). The given situation is a huge concern to the US as it promotes Chinese stakes in at the global level not just with the United Nations but also with the rest of the world. Chinese influence is rapidly growing considering their political manoeuvres and especially their alliance with Russia. China shares a huge border with Russia and has consistently supported it on many occasions. For example, the Chinese have always supported Russians actions against Ukraine urging the West to consider Russia’s security concerns over Ukraine. Moreover, the Chinese have been willing and ready to conduct business with the Russians. For example, in 2012, the Chinese foreign minister Wang Yi said that China was ready and willing to offer loans to initiate the building of the new Russia-China gas pipeline, and it is evident that China does not want to see the economic collapse of Russia.

**Brexit as an economic threat to the USA**

The departure of Britain from the European Union will definitely send shock waves to the economy of the United States given that the two are long-term allies. The United States is a critical ally and trade partner of the Britain (Ciuriak et al. 2017). For that reason, a massive political action by the Britain must have an impact on the U.S economy both as a political ally as well as a trade partner. It is right to argue that the consequences of Brexit will have a negative impact on the economy of the United States to a huge extent. The same is mirrored by the ongoing uncertainty with respect to the terms of Brexit. The Britain policymakers are divided on whether to adopt ‘hard’ or ‘soft’ Brexit either of which is likely going to affect not just the United States but also the rest of Europe and the world in general. Policy makers believe that Brexit is the largest and immediate risk that faces financial markets both locally and globally, especially with regard to migration (like many times before) (Strielkowski and Weysskrabova 2014). The tremor that was caused by the Britain’s exit was felt not just by the United Kingdom but also by other countries and nations such as the United States of America. From the given analysis, it is evident that the Brexit will likely have a considerable impact (possibly negative) on the global economy and these are some of the risks and dangers that the United States is also likely to face both in the short run as well as in the long run.

**3.2. Political Threat to the United States**

*The threat to America’s Democracy through internal divisions*

The massive internal division of the American society continues to threaten its unity as a democracy. Violence against lawmakers, inaccessibility of the white house by the press and the apparent ease with which the Russians influenced America’s elections only proves that its democracy is at risk (Barber, 2017). The deep political division and distrust of the government are only widening the rift between opposing factions of the American society. It is for that reason apparent that the ethnic division and xenophobic behaviour promoted by the far-right wing politics will only worsen the situation.
Relations with North Korea, China, and Russia

The emergence of China as a political force with nuclear power is a massive threat to the United States considering its alliance with Russia and North Korea. Since the last round of UN sanctions, North Korea has issued threats to the United States, and policymakers believe that the threats of North Korea to the United States is potent. North Korea has always threatened South Korea, a key ally of the United States in the region. For example, in 1994 South Koreans panicked after a threat by the North Korea to turn Seoul into a “Sea of fire”. The same threat has been repeated several times, and in 2012, the army warned that artillery was aimed at the seven South Korean media groups, and they were threatened by a merciless massacre. In recent years, North Korea has consistently warned a pre-emptive nuclear attack on the US soil in response to a prospect of joint military exercise between the South and US (Barber, 2017). The tension imposed by North Korea and the possible attack on the United States is viewed as an issue that threatens the cohesion and even the future of the nation.

However, to confirm whether or not the United States is a real target of North Korea’s threat, a test was carried out on the fragments of the rockets that were fired in December 2012, and it indicated that it had a range of 10,000 km and hence putting the United States within the range. It is the evidence that North Korea is a real threat to the United States both politically and in terms of security (Reynolds 2002). However, apart from North Korea, the United States also has Russia and China to worry about, and this makes it hard for the country to concentrate in alleviating one particular threat (Haytko et al. 2018). Furthermore, its continual involvement in the endless wars only makes it impossible to recover and in time both financially as well as politically (Reynolds 2002). Finally, from the analysis of the economic and political threats to the United States, it is evident that internal divisions and the emergence of nuclear powers are key political threats (Ahn 2011). On the other, in terms of economic, the rising public debt and the rise of China as economic power poses a huge challenge to the dominance of the United States as economic and world power. More needs to be done for the nation to maintain its position as the world’s most powerful country in terms of economics and politics.

3.3. Energy and energy policy threats to the United States

Finally, the last but not the least important threat to the country’s economic and political security is the issue of energy and energy policy threats. United States is a vast and diverse country with a large consumption of energy. It has been estimated that if everyone on planet Earth had the same consumption patterns as an average U.S. citizen, the humankind would have needed at least 5 planets like the one it dwells upon (McDonald 2015). Thence, in spite of U.S. large oil and gas resources, its energy consumption patterns constitute its big threat.

These trends have not stayed unnoticed by the U.S. government. In February 2009, in his speech at the Congress U.S. President Barack Obama called for doubling renewable energy within the following three years. The progress in the renewable energy has been apparent ever since. Currently, renewable energy accounts for about 20% of total electricity production in the United States with such sources as hydro, wind and solar rising (see Figure 1).
However, the new presidents Donald Trump has shifted the U.S. energy focus. Under his presidency, the country did not ratify the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris on the 12th of December 2015 (so-called “Paris Agreement”) (Strielkowski et al., 2016). This represents a very serious concern, since the Paris Agreement was especially initiated in order to find solutions to the impending climate policies and challenges faced by the key players, such as United States itself.

4. Discussions and closing remarks

A wide range of factors, as enumerated in above, pose a threat to the attainment of development goals and objectives, in the context of development as defined under the human development index perspective. Political impediments are multidimensional, encompassing the political system, political decisions, energy strategies, and administrative policies (Balaam and Dillman 2015). As such, as a system of government, democracy in United Kingdom and United States support development but some policies, with roots in political element, are detrimental to development, such as Britain’s exit from the European Union (Brexit), which could be an impediment to the collective development even though it may promote the interests of the particular country. Political competition and failures in creating and maintaining global partnerships for development in line with MDGs and SDGs as is evidenced by the continuous competition between the United States and China. This scenario gives rise to the economic factors that are an impediment to the achievement of development, including disparities, inequalities, poor economic policies, and restrictive trade practices which hinder development at the national and international levels.

Social factors on the other hand, as enumerated by Dell’Angelo et al. (2017) include all the factors, attributable to changes in the society that impede development, which from the HDI perspective encompass population growth and the ensuing pressures on the environmental resources. The global population growth, including rapid growth of the population in China, United States, and Britain, has resulted in a significant impact on the environment and the accompanying problems, such as global warming. Environmental factors, including environmental degradation, natural resources endowments, and natural calamities or disasters are the other impediments to the development, with countries that have been endowed, but nearing the depletion of environmental resources, such as the United States, Britain, and China, causing a major impediment to sustainable development because of the threats posed by the impediment threat of resources depletion (Hák et al. 2016).
Last but not least, the impending climate changes, global warming and raising CO₂ emissions also represent a threat and call for the modernization of energy policies and energy strategies. Renewable energy should be promoted in spite of its current higher per-unit costs. This is a political decision that needs to be done in order to ensure sustainable development and economic growth in the future volatile and changing world.

5. Conclusions and implications

Sustainable economic development, assessed from the human development index perspective, is more holistic and includes multiple indicators of development over and above the conventional economic indicators. As such, a wide range of factors pose a threat to sustainable development nationally and internationally, when development is considered from the HDI perspective. Political factors are multi-dimensional, encompassing political systems, stability, administration, and policies of the country, and the ensuing political competition between different countries. For example, democratic systems present an opportunity for development while autocratic systems may be a hindrance to development. Economic factors on the other hand, include different aspects of the national and international economy that hinder development in terms of fostering good living standards of the people. Social factors on the other hand, include demographic changes, such as population growth and the subsequent effect on the attainment of development, such as pressures on the environment as an impediment to development. Subsequently, the other factors are environmental factors, which are also multi-dimensional covering resources endowments or natural calamities as an impediment to development.

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References


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