

# THE IMPACT OF A MILITARY UNIT ON THE SOCIO-ECONOMIC SITUATION OF MUNICIPALITIES IN THE CONTEXT OF LOCAL DEVELOPMENT

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**Abstract:** This paper presents the results of a survey conducted among residents of municipalities. Respondents expressed their opinion on selected aspects of the impact of the military unit located in their municipalities on the socio-economic situation. Centre for Public Opinion Research (Polish: CBOS) results were also referenced.

**Keywords:** municipality, military unit, socio-economic situation.

## Introduction

Military unit location in a specific geographical area is dictated by considerations of national security and is generally not a subject of municipality competition. It can be regarded in the context of the municipality's possession of specific resources, which, to a certain extent, may be included in the local development process (Jewtuchowicz, 2013, p. 129-130). In light of the resource approach (Floyd, Sherman, Sigismund, Terjesen, 2011, p. 45-51), the organisation is perceived as a "bundle of resources, skills and competencies" (Nowakowska-Krystman, 2014, p. 48-50). With regard to the municipality, the combination of resources located on its territory determines the development based on the created competitive advantage (Klasik, 2002, p. 39-52). Local development "includes (...) the regional environment of the life of communities that are considered local, and is conducted from the point of view of the needs of these communities, regional development resources, and with the involvement of local communities, regional government structures and other organisations and institutions (...)" (Parysek, 2001, p. 46). Local development can be equated with the notion of socio-economic development as socio-economic processes and their effects are related to specific spacial units and are placed in time. In the economic dimension, development signifies changes of a quantitative as well as structural and qualitative nature (Milewski, 1994). In turn, in the social

dimension it signifies changes in the approaches, preferences and practices in the society, and increased access to public services, and social, technical and economic infrastructure, enabling wider satisfaction of diverse needs, and thus increasing the residents' quality of life (Piotrowska-Trybull, 2013).

The factors of local development, as assessed by J.J. Parysek, may include: the need for local communities, workforce, natural resources and qualities of the environment, infrastructure investments, economic potential, local and external markets, financial capital, the level of education, technology and culture, modern production technologies, the territory and areal benefits, international relations and bilateral cooperation (Parysek, 2001), and the localisation of national institutions, including military units. In the context of army presence<sup>1</sup> in a particular territory, it should be emphasised that its activities are not aimed at achieving effects within the municipality, but at the effective performance of its function, which is to ensure national security, addressed towards the general public. The army, as an element of the local economy, contributes to the potential of the region in which it is located, and at the same time is a part of the national economy (Polski, 2007).

A military unit stationed in a municipality's territory performs defence tasks, and at the same time its presence fosters relationships with local entities (local government, residents, schools, various associations). The role and place of a military unit in the local community is specified by its internal elements, i.e. the structure and size of staff, conducted tasks, intensity of cooperation with municipality entities, as well as external elements, i.e. community size – its population and economic potential, as well as its character – rural or urban.

In the context of relations between the army and local communities, in the national and foreign secondary sources the following issues are discussed: consequences of the army "leaving" a particular area (social, economic), the process of transferring post-military assets to other users, revitalising the natural environment, activities related to the reconstruction of the regional economy, as well as the impact of the army on local development. Among the consequences of army withdrawal for the local community, the following effects are emphasised: an increase in unemployment and a decrease in employment (Stenberg, 1998; Stenberg, and Rowley, 1993; Sirko, and Piotrowska-Trybull, 2013), production limitations, decrease in income and demand (Paloyo, Vance, and Vorell, 2010), migration (Andersson, Lundberg, and Sjöström, 2007), limitation of demand for public sector services (Piotrowska-Trybull, 2011; Thanner, and Segal, 2008), and changes in the real estate market (Stenberg, 1998; Dardia et al., 1996). The results of our own analysis and those presented in secondary sources allow for the formulation of the conclusion that the influence of military units on local development varies and depends on the territorial unit type in which the army is quartered. The impact of military units on the socio-economic situation in a municipality may take place

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<sup>1</sup> This paper will consider the military as regular troops of given kinds of armed forces (Szymczak, 1981, p. 745). More on the relations between the notions of military, armed forces and army at work (Piotrowska-Trybull, 2013).

in various forms and with varying intensity at the social, economic, environmental and technical levels. With respect to the living conditions of the residents and the conditions for running a business, this impact may be both direct and indirect (Table 1).

**Table 1.**

*The impact of a military unit at social and economic levels*

Social	Economic
<ul style="list-style-type: none"> <li>• limits the population outflow from the municipality</li> <li>• contributes to the population inflow to the municipality</li> <li>• affects the level of education in the municipality</li> <li>• contributes to establishing foreign contacts</li> <li>• develops cooperation with schools and strengthens patriotic attitudes among children and youth</li> <li>• influences the level of security</li> </ul>	<ul style="list-style-type: none"> <li>• diversifies the labour market in the municipality</li> <li>• contributes to the creation of new jobs in the municipality</li> <li>• stabilises/dynamises the demand in the municipality</li> <li>• provides revenue to the local budget</li> <li>• contributes to the development of local businesses</li> <li>• contributes to the development of services</li> </ul>

Source: authors' own elaboration.

Considering the above, the article focuses on the identification of the directions, extent and ways of influence of the army at social and economic levels in selected municipalities. To this end, qualitative and quantitative methods were used, in particular: analysis, synthesis, inference and survey method.

## Survey Implementation

Surveys were conducted using the CATI method<sup>2</sup> in November 2017. At the request of the authors, they were conducted by ASM. The authors prepared the questions that the respondents were asked. 600 people, drawn in proportion to the population from individual municipalities, were asked about their opinion on the impact of the military units on the situation in their municipality in the context of regional development. The respondents were divided by sex and age (18-34 years, 35-54 years, 55-75 years, above 75 years), taking into account the proportion of residents in individual municipalities. Among the respondents, professionally active people were the most numerous group (49.0%). The remaining ones are: pensioners (38.3%), students and pupils (3.2%), and unemployed (9.5%). The respondents had: higher (38.8%), secondary (46.5%), vocational (10.7%) and primary (4.0%) education.

In the article, the results of our own analyses of the data obtained from the ASM company are presented. They were conducted using Excel and Statistica v. 13.1. The presented measures of descriptive statistics are derived from the level of measurement used in the questionnaire. Test  $\chi^2$  was used to verify the statistical hypotheses. The results presented in the article were

<sup>2</sup> Computer Assisted Telephone Interview. Advantages and disadvantages of the method are presented in the paper (Szreder, 2010).

statistically significant at the level of 0.05. Figures (1, 3, 4, 6) present the results of correspondence analysis<sup>3</sup>. The information used to characterise the municipalities was obtained from the Polish Central Statistical Office (Local Data Bank) website.

## Characteristics of the municipalities

Within the municipalities in which the surveys were conducted the following urban municipalities were included: Braniewo, Brzeg, Chełmno, Hrubieszów, Słupsk (a city county). The Słupsk municipality occupied the largest area, while the Braniewo municipality occupied the smallest area (Table 2).

**Table 2.**

*Area and location of the municipalities within which the survey was conducted, as of the end of 2016*

Territorial unit	Location of the municipality in the province	Area in km <sup>2</sup>
Braniewo	Warmińsko-mazurskie	12
Brzeg	Opolskie	15
Chełmno	Kujawsko-pomorskie	14
Hrubieszów	Lubelskie	33
Słupsk	Pomorskie	43

Source: based on the data of Local Data Bank of the Central Statistical Office, <https://bdl.stat.gov.pl/BDL/dane/teryt/tablica>, January 8, 2018.

Within the territory of the analysed municipalities, military units representing various types of armed forces were stationed. In 2016, the municipalities were inhabited by 183,416 residents. Słupsk was the most populated (91.9 thousand residents), followed by Brzeg (36.2 thousand residents), and the smallest population was in Braniewo (17.1 thousand residents) (Table 3). In recent years the number of residents has decreased in all analysed municipalities. In 2016, the change in population per 1,000 inhabitants ranged from (-2.2) in Braniewo, to (-11.6) in Hrubieszów.

The analysed municipalities varied in terms of population density. The highest density of population in 2016 was recorded in: Brzeg – 2,484 residents per km<sup>2</sup> and Słupsk 2,131, while the lowest occurred in Hrubieszów – 547 residents. Comparing the population density of the

<sup>3</sup> They are interpreted on the basis of the location of the points reflecting the categories of specific variables. Points far away from the centre of projection provide the largest contribution to abandoning the independent variables hypothesis. Close proximity of points belonging to different variables indicates the existence of connections between the categories. Close proximity of two points belonging to the same variable indicates a high similarity of their profiles. For better illustration, the location of some points is distinguished by a dotted line. More in the studies (Stanimir, 2005; Stanisz, 2007).

analysed municipalities to the national average (123 residents per km<sup>2</sup> in 2016), it was higher in all of them<sup>4</sup>.

**Table 3.**

*Population of municipalities in which military units are stationed, state at the end of 2016*

Territorial unit	Population in 1 km <sup>2</sup>	Change in population per 1,000 residents	Number of residents	Internal migration balance	Foreign migration balance	Rate of natural increase per 1,000 residents	Population of non-working age per 100 residents of working age
Braniewo	1,380	-2.2	17,123	-39	0	0.00	55.9
Brzeg	2,484	-4.9	36,292	-83	11	-1.90	64.9
Chełmno	1,474	-11.1	19,991	-119	-16	-2.04	61.5
Hrubieszów	547	-11.6	18,075	-118	-12	-2.69	60.4
Słupsk	2,131	-6.1	91,935	-357	6	-2.26	65.0

Source: own elaboration.

The demographic burden rate in the analysed municipalities was relatively high<sup>5</sup>, indicating adverse changes in the population structure. In 2016, the highest demographic burden rate was recorded in Słupsk, where the non-working age population per 100 residents of working age was 65. The lowest demographic burden rate among the analysed towns was recorded in Braniewo, – 55.9.

Taking into consideration the rate of natural increase in 2016, the most adverse situation was recorded in Hrubieszów (-2,69), and the most beneficial in Braniewo (0.0).

In 2016 in all the analysed municipalities negative internal migration balance was recorded. This means that the number of people who left the municipality exceeded the number of people who arrived. The highest negative internal migration balance was recorded in Słupsk (-357 people), and the lowest in Braniewo (-39). A negative international migration balance was recorded in two municipalities: Chełmno and Hrubieszów: (-16), (-12), respectively. In Braniewo, the same number of people went abroad as arrived in the municipality. In Słupsk and Brzeg the balance was positive and amounted to 6 and 11, respectively.

Comparing the situation in the labour market in 2011 and 2016, there had been a noticeable improvement in the labour market in the analysed municipalities. The total number of people registered as unemployed in the Braniewo, Hrubieszów and Chełmno municipalities decreased (from 23% to 29%), while in the two biggest analysed towns, Brzeg and Słupsk, it fell by about 50%. A similar tendency occurred in relation to the number of people registered as unemployed up to the age of 25. In 2016, in comparison to 2011, the number was reduced by at least 50%

<sup>4</sup> Territorial Profile of the Area and Population in 2017, Statistical Information and Elaborations, GUS (Central Statistical Office), Warsaw, 2017, <https://stat.gov.pl/obszary-tematyczne/ludnosc/ludnosc/powierzchnia-i-ludnosc-w-przekroju-terytorialnym-w-2017-r-,7,14.html>, January 8, 2017.

<sup>5</sup> People of working age are people of an age that enables them to work. The age adopted was in the range of 15-64 years for men and 15-59 years for women. People of non-working age: people of pre-working age, i.e. 14 years and less, and of post-working age, i.e. men 65 years and above, women 60 years and above.

in Braniewo, Hrubieszów and Chełmno, while in Brzeg and Słupsk by more than 60% (Table 4).

**Table 4.**

*The labour market in municipalities in which military units are stationed, as of the end of December of 2011 and 2016*

Municipalities Variables	Braniewo		Brzeg		Hrubieszów		Chełmno		Słupsk	
	2011	2016	2011	2016	2011	2016	2011	2016	2011	2016
The total number of registered unemployed	1,401	1,019	2,422	1,274	1,538	1,173	1,496	1,062	4,692	2,208
People registered as unemployed under 25 years of age	267	142	369	130	268	134	266	149	696	219
People registered as unemployed over 50 years of age	291	256	724	470	331	272	373	295	1,256	701
People registered as long-term unemployed	804	611	1,208	639	1,054	790	835	669	2,351	968
Share of people registered as unemployed in the population of working age, in %	12.0	9.3	10.1	5.8	12.5	10.4	11.0	8.6	7.6	4.0
Employed people per 1,000 residents	182	192	227	201	221	229	213	234	286	290

Source: based on the data of the Local Data Bank of the Central Statistical Office, <https://bdl.stat.gov.pl/BDL/dane/teryt/tablica>, November 1, 2018.

On the other hand, in relation to the number of people above 50 registered as unemployed, an improvement was also recorded, although it was slightly smaller than in the case of the above-mentioned variables: about 12% in Braniewo and about 44% in Słupsk. Another important variable in the context of the labour market is the time span of unemployment. In all the analysed municipalities the population of long-term unemployed decreased between 2011 and 2016. The highest decrease in this regard was recorded in Słupsk – about 58%, the lowest in Chełmno – almost 20%. A similar tendency was noticed in terms of the share of people registered as unemployed in the working population as in terms of the above-mentioned variables, namely, in the most populated towns the unemployment rate in relation to the number of the working age population was the lowest, which means that the larger urban centres dealt with unemployment slightly better.

From the point of view of regional development stimulation, entrepreneurship and local community activities, as well as building social capital are extremely important factors. Changes in the area of entrepreneurship are reflected in the increase or decrease of the number of economic subjects entered in the REGON register per the total number of residents and the number of working age residents, as well as change in the number of newly registered subjects. In turn, the activity of the local community and the potential development of social capital can be inferred by analysing, among others, the number of foundations, associations and social organisations per 10,000 residents (Table 5).

**Table 5.**

*Entities of national economy<sup>6</sup> in municipalities where military units are stationed, as of the end of December 2011 and 2016*

Municipalities Variables	Braniewo		Brzeg		Chełmno		Hrubieszów		Słupsk	
	2011	2016	2011	2016	2011	2016	2011	2016	2011	2016
entities entered in the REGON register, per 10,000 residents	875	954	1,374	1,391	847	879	1,026	1,098	1,394	1,404
newly registered units in the REGON register, per 10,000 residents	74	79	91	76	83	63	56	66	100	87
entities deleted from the REGON register per 10,000 residents	103	63	116	88	80	63	118	63	153	90
natural persons <sup>7</sup> performing an economic activity per 100 people of working age	8.6	9.3	15.1	15.5	9.4	9.7	12.3	13.2	15.3	15.4
foundations, associations and social organisations per 10,000 residents	25	34	21	30	35	42	23	30	33	45
share of de-registered entities in the total number of entities entered in the REGON register (in%)	11.8	6.6	8.4	6.4	9.5	7.2	11.5	5.8	11.0	6.4
share of newly registered creative sector entities in the total number of newly registered entities (in%)	5.30	5.15	7.92	9.78	7.47	3.97	3.77	6.67	5.96	5.50

Source: based on the data of the Local Data Bank of the Central Statistical Office, <https://bdl.stat.gov.pl/BDL/dane/teryt/tablica>, November 1, 2018.

In all analysed municipalities the number of entities entered in the REGON register per 10,000 residents was higher in 2016 than in 2011. The highest growth was noted in Braniewo – 9% and Hrubieszów – 7%. The lowest increase occurred in Słupsk – approximately 1%. The highest growth of newly entered entities per 10,000 residents in the REGON register was noted in Braniewo and Hrubieszów, by 6.7% and 17.4%, respectively. In the remaining urban municipalities, in this regard, declines were noted in Brzeg (16%), Chełmno (26%), and Słupsk (13%). At the same time, in all municipalities a decline in the number of entities deleted from the REGON register took place, as well as a decrease in the share of de-registered subjects in the total number of subjects entered into the REGON register, which may suggest a general improvement of the economic situation in the municipalities. In the context of residents' entrepreneurship, it is worth emphasising that in every municipality a growth in the number of

<sup>6</sup> A legal person, an organisational unit without legal personality and a natural person operating a business, <http://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-pu-blicznej/814,pojecie.html>, January 13, 2018.

<sup>7</sup> Entrepreneur as defined by the Act of July 2, 2004 on the freedom of economic activity and another neutral person holding. Neutral person conducting educational activity is not subject to entry, <http://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/814,pojecie.html>, January 13, 2018.

natural persons conducting economic activity per 100 residents of working age was noted, the highest being in Braniewo and Hrubieszów, both around 8%. On the other hand, a conversion of the number of persons conducting an activity per 1,000 residents indicates that the economic activity in the municipalities of Brzeg, Chełmno and Słupsk is slightly lower than in Braniewo and Hrubieszów. At the same time, the number of foundations, associations and social organisations per 10,000 residents has increased in all municipalities. The most dynamic growth was recorded in Brzeg (45%), Braniewo and Słupsk (around 35% each).

Considering the newly registered entities in the creative sector in relation to the total number of entities registered in the municipalities, a positive tendency can be noted in Brzeg and Hrubieszów. This can potentially increase the number of innovative solutions in these municipalities, with a decrease in the share of these entities in the remaining ones.

### **Residents' opinions about the influence of the military unit on the situation in the municipality**

The results of the surveys conducted so far indicate inner connections between military units and their local environment. Using the resources, the units perform the tasks assigned to them while providing the collective good of security to the environment and generating effects resulting from the use of resources. From the perspective of some municipalities, the military units stationed in their territory can be a favourable circumstance. In the case of others, it can limit their development to a greater or lesser degree. In this situation, proper relationships between the army and the environment (local authorities, schools, associations and other social organisations) are very important.

According to the majority of respondents (61.0%), the military unit is in a good relationship with local entities. Such an answer was given by 83.3% of respondents from the Hrubieszów municipality and 83.9% of those surveyed in the Braniewo municipality. In the remaining municipalities, the percentage of those indicating good relations between the military unit and its environment was lower: Brzeg (66.7% of respondents from this municipality), Słupsk (56.7%), and Chełmno (54.8%). The highest percentage of responses indicating proper links between the army and its environment was found in the youngest (18-34) and oldest groups (over 75 years) of respondents (66.7% in both groups), and among students (79.0%). In each municipality there were also people (35.7% of the total number of respondents<sup>8</sup>) who could not take a clear position on the issue in question, or perceived it negatively (3.3%).

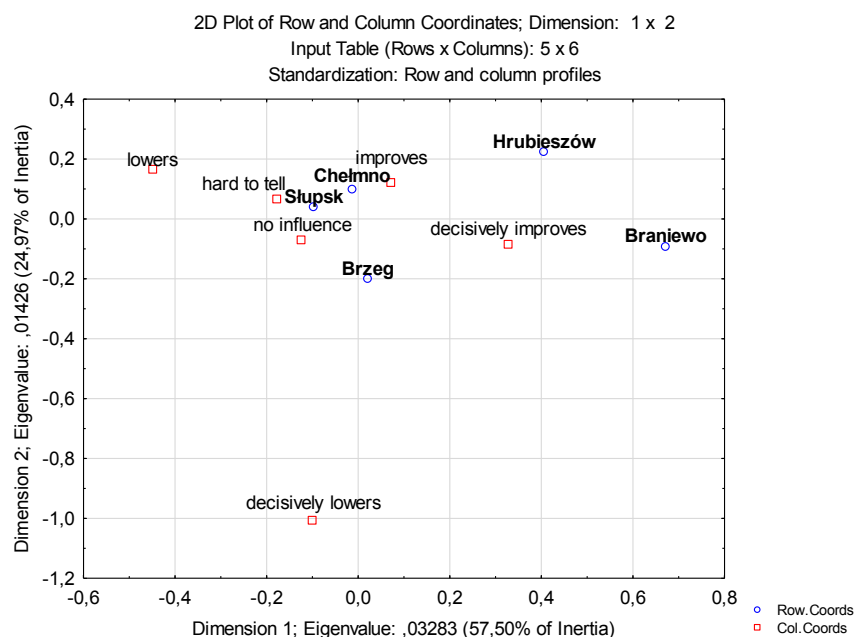
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<sup>8</sup> Both respondents in touch with people who work or worked at a military unit stationed in their municipality (49.5% of respondents within this group) and those who had never had contact with such people (58.5%) could be found in this group.



The quality of life of the residents is shaped by many factors. As such, among others, the following were indicated (Gawlikowska-Hueckel, and Umiński, 1999): the demographic situation, the state of the natural environment, the housing situation, transport and communication, education and training opportunities, access to culture, the level of health and healthcare among the residents, the commercial network, the standard of living, the level of security, and opportunities for recreation and leisure.

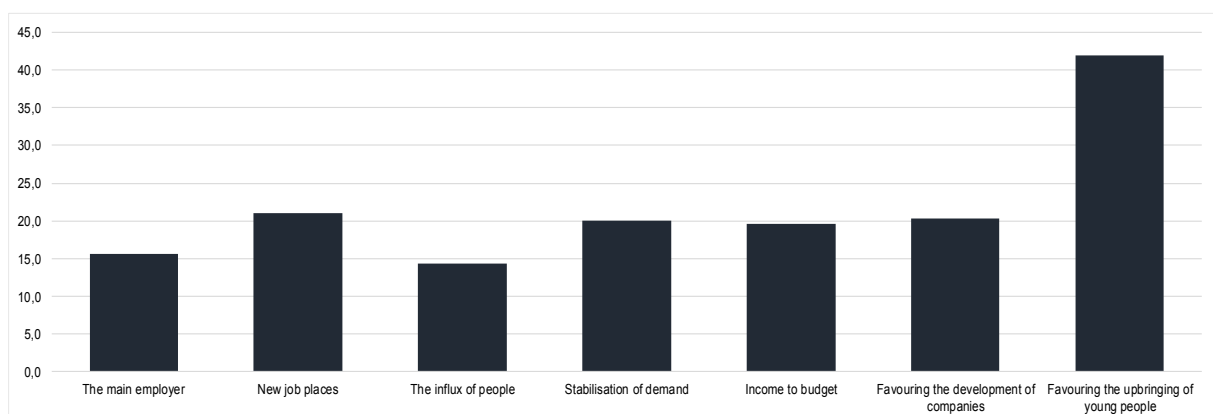
In a situation where a military unit offers jobs, cooperates with schools, ensures income to the regional budget, and can directly and indirectly influence the development of local companies (Piotrowska-Trybull, 2013; Sirko, and Piotrowska-Trybull, 2013), the respondents were asked about the military unit's impact on the standard of living of the residents of the municipality where the unit is located. According to nearly half of the respondents (49.6%), the military unit's presence contributes to enhancing the quality of life. Others (43.2%) did not see such influence or believed that the presence of the army contributes to a decrease in the quality of life in their municipalities (4.0%). The rest (3.2%) could not take an unambiguous position. The army's beneficial influence was noticed in all of the analysed municipalities. Among them were 73.9% of those surveyed from the Braniewo municipality, 73.0% from the Hrubieszów municipality, 50.7% from the Chełmno municipality, 46.6% from the Słupsk municipality, and 46.2% from the Brzeg municipality (Figure 1). Those who noticed a positive influence of the military unit on the quality of life were men (48.1% of all men) and women (50.9%). Respondents of all age groups and different levels of education were conscious of such an influence. The highest percentage of such indications occurred in the group of 18-34 years (56.5%) and among students and pupils (84.2%), with the lowest in the group 55-75 years (43.7%) and those who were retired (47.0%).



**Figure 1.** Opinion of the respondents on the influence of the military unit on the municipality residents' quality of life. Source: authors' own elaboration.

Military units influence the local labour markets to a greater or lesser degree. On the one hand, they can provide employment to residents of the municipality as well as outsiders, and on the other, if they are disbanded, more unemployed people can appear in the labour market<sup>9</sup> (Piotrowska-Trybull, 2013; Sirko and Piotrowska-Trybull, 2013) or the level of employment can be lowered (relocation of the army also results in the transfer of soldiers to other places where they continue to serve). According to 94.6% of the respondents from the Hrubieszów municipality and 82.6% from the Braniewo municipality, it is hard to find employment. In the case of the Chełmno municipality the situation differs slightly as 63.0% of the respondents indicated problems with gaining employment. An even smaller percentage of such responses was recorded among the respondents from the Brzeg municipality (41.7%) and the Słupsk municipality (40.6%), where in 2016, as compared to 2011, the biggest fall in unemployment was noted. 42.6% of men and 53.9% of women surveyed pointed out problems with finding a job. The biggest percentage of such indications, which is rather obvious, occurred among the unemployed (77.2%) and primary education holders (62.5%). It was observed that the younger the respondents, the higher the percentage of those claiming that finding a job is easy in that particular age group (statistically significant relationships at  $p < 0.05$ ). Students and pupils (57.9% of this group) and those professionally active (58.2%) did not see problems with gaining employment within their municipalities. Along with the increase in the level of education of the respondents, the percentage of those for whom finding employment is not a problem also increased (primary 33.3%, secondary 46.2%, vocational 46.8%, higher 50.6%).

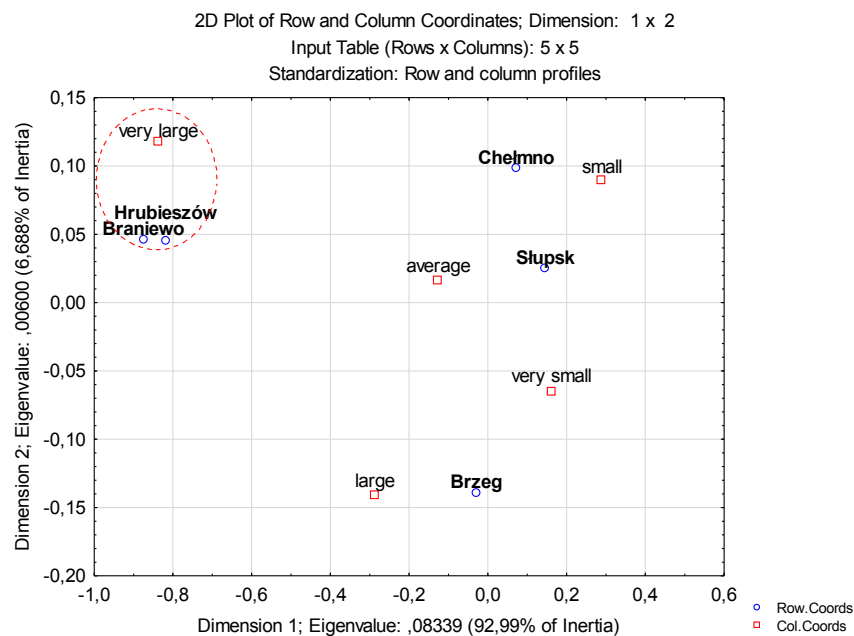
During the survey the respondents were asked to assess the level of impact that a military unit stationed in their municipality can have on the socio-economic situation. Among the statements proposed to the respondents regarding the areas of influence, the highest percentage of responses point to a high or very high influence of the army achieved by the upbringing of young people (Figure 2).



**Figure 2.** High and very high influence of the military unit in particular areas (data in %). Source: authors' own elaboration.

<sup>9</sup> According to the analyses carried out by the authors of the article (municipalities of various natures were taken into account), dismissing several hundred people would cause unemployment to rise by a few dozen percentage points, while for others, especially in urban municipalities, it would have an insignificant effect on the employment market.

Respondents' opinions regarding the role of the military unit in the local labour markets were divided. The smallest group (15.7%) claimed that it was one of the main employers in the municipality. A significantly bigger group of respondents believed that the role of the army in this regard was minor (53.8%) or average (30.5%). The significance of a military unit as an important employer was noticed by 39.1% of the respondents from the Braniewo municipality and 37.8% from the Hrubieszów municipality (Figure 3). In the remaining municipalities responses prevailed indicating the small role of the army in this regard (Słupsk 60.0%, Chełmno 56.2%, Brzeg 52.3% of the answers). As a result of the analysis it was found that the younger and more educated the respondents were, the higher the percentage of them who did not indicate the military unit as an important employer (18-34 years – 61.9%, 35-54 – 55.7%, 55-75 years – 48.6%, over 75 years – 40.4%) (higher – 63.1%, secondary – 50.2%, vocational – 46.9%, primary – 25.0%) (statistically significant relationships at  $p < 0.05$ ).



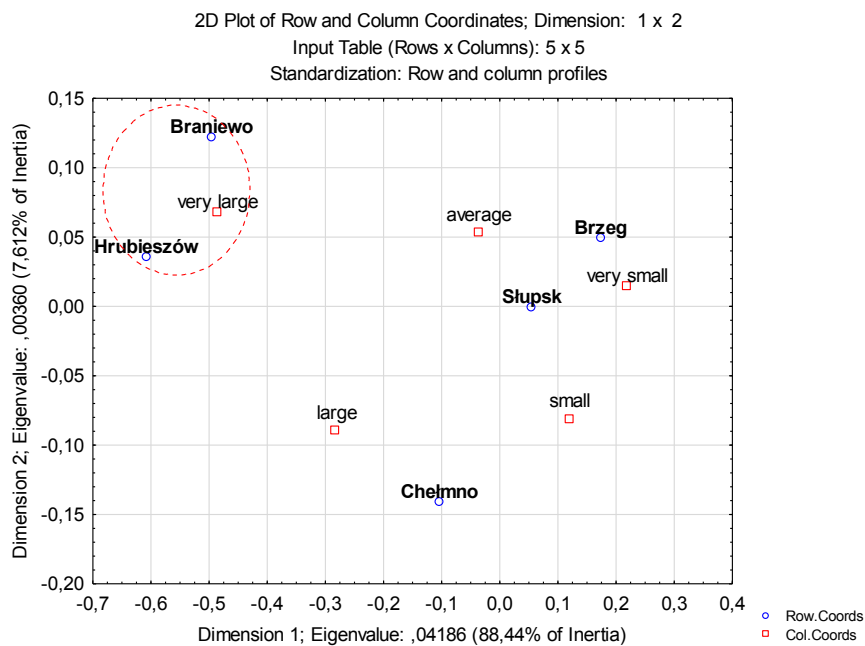
**Figure 3.** Evaluation of the role of the military unit as the main employer. Source: authors' own elaboration.

In the opinion of every fifth respondent the presence of a military unit in the municipality encourages the emergence of new jobs. A different view in this regard was expressed by more than half of the respondents (50.2%), while the rest (28.8%) perceived the impact of the military unit on to the emergence of new jobs as average. Similarly to the question about the role of a military unit as an employer, the possibility of new jobs emerging as a result of its being stationed in the territory of a municipality was mainly observed by respondents from the Braniewo municipality (43.5% of respondents from this municipality) and from the Hrubieszów municipality (40.5%). In remaining municipalities the answer suggesting a minor role of the army in this area was chosen more commonly (Chełmno 61.7%, Brzeg 53.%, Słupsk 50.2% of all of the answers). It was established that the higher the level of education, the bigger the percentage of those assessing the presence of the army as having little impact on the emergence

of new jobs in the municipality (primary – 33.3%, vocational – 42.4%, secondary – 49.1%, higher 55.4%) (statistically significant relationships at  $p < 0.05$ ).

Due to the presence of a military unit, soldiers arrive in a municipality, often with their families. Others, after leaving service, remain in the municipality permanently as pensioners. The inflow of people to a municipality as a result of the stationing of a military unit was noticed by 26.1% of the respondents from the Braniewo municipality and 29.7% from the Hrubieszów municipality. In the remaining municipalities the percentage of those people was lower (Słupsk 14.3%, Chełmno 13.7%, Brzeg 8.3% of all of the answers). Regardless of age, education and professional situation, the respondents commonly indicated that a military unit's contribution to the population influx to the municipality is minor. No statistically significant relationships were noted between those variables and the opinion of the respondents about the increase of the population in a municipality as a result of the presence of the army.

A military unit employs both soldiers and military personnel. Their fixed number, with fixed income, creates the possibility to sell goods and provide services by the local economic entities. In the opinion of every fifth respondent, the presence of the army in a municipality contributes to the stabilisation of demand in its territory. Such a dependence was noticed by 40.5% of respondents from Hrubieszów and 34.8% of those from the Braniewo municipality (Figure 4).

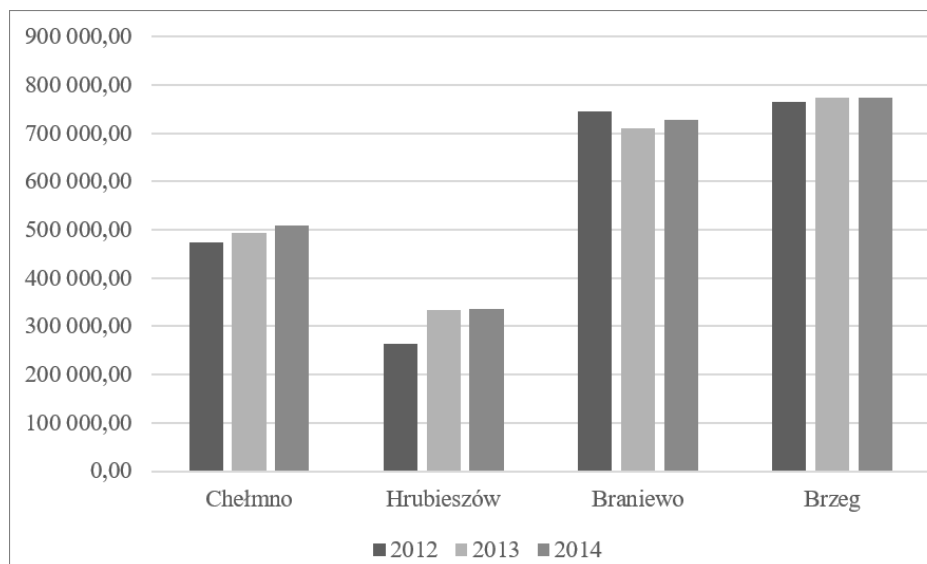


**Figure 4.** Assessment of the military unit's influence on the stabilisation of demand in a municipality. Source: authors' own elaboration.

In the remaining municipalities the percentage of indications in this area was smaller (Chełmno 26.0%, Słupsk 17.6%, Brzeg 14.4% of all answers). It was established that the higher the level of education held by the respondents, the higher the percentage of responses indicating a lack of a military unit's influence on the stabilisation of demand in a municipality (primary – 37.5%, vocational – 43.7%, secondary – 43.7%, higher – 48.1%) (statistically significant

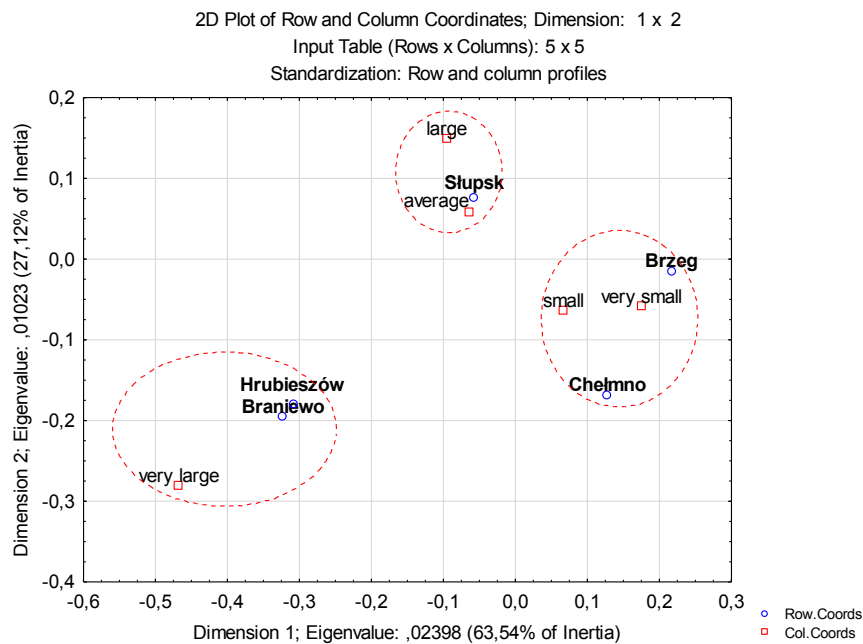
relationships at  $p < 0.05$ ). In the case of the remaining variables, no statistically significant relationships in reference to the presented issue were found.

The stationing of a military unit in the territory of a municipality is important for economic reasons. As an entity belonging to the public finances sector the military unit settles accounts with the Regional Infrastructure Boards, which transfer property taxes, agricultural taxes, forestry taxes and vehicle taxes to the municipal budget (Sirko, and Piotrowska-Trybull, 2013). The share of those taxes in the municipal income differs for each of them. Between 2007 and 2014, the average value of income to the urban municipal budget from the property tax amounted to PLN 4,872,458 (Piotrowska-Trybull, and Sirko, 2015). The income from the property tax in the years 2012-2014 in the analysed municipalities is illustrated by Figure 5, with the exception of Słupsk. In the analysed period the highest income from this source was in Brzeg (average annual at a level of PLN 771,000), and the lowest in Hrubieszów (PLN 310,000).



**Figure 5.** Revenue from property tax between 2012 and 2014 (in PLN). Source: authors' own elaboration on the basis of data acquired from Regional Infrastructure Boards in: Bydgoszcz, Lublin, Olsztyn and Wrocław.

Respondents' opinions on the amount of income transferred to the regional budget thanks to the presence of a military unit varied. The highest percentage of answers in the Braniewo municipality (43.4% among the respondents from this municipality) suggested medium revenue sent to the self-government's budget, while in the Hrubieszów, Słupsk, Brzeg and Chełmno municipalities, the largest group of respondents (respectively: 37.8%, 40.3%, 53.0%, 54.8% of the total) deemed the revenue minor (Figure 6).



**Figure 6.** Assessment of military unit influence in terms of providing revenue to the regional budget. Source: authors' own elaboration.

Sales outlets, catering outlets and other facilities used by the soldiers, the military personnel and their families on a daily basis profit from the presence of a military unit. As a result of successful tenders, other companies provide specific materials to a unit or perform work in the unit's territory (Piotrowska-Trybull, and Sirko, 2013). These relations were noticed by every fifth respondent. According to others, a military unit's influence on the local companies is minor (50.3% of all respondents) or average (29.3%). The highest percentage of answers indicating the influence of a military unit on the condition of local companies was noted among the respondents from the Hrubieszów municipality (35.1% of all respondents from this municipality) and from the Braniewo municipality (34.8%). Among the respondents from the remaining municipalities the percentage of such indications was lower (Słupsk 21.8%, Chełmno 15.1%, Brzeg 12.9% of all answers). The army's contribution to the development of local companies was noticed by the respondents regardless of their occupational situation and educational level. This answer was most popular among the youngest age group (18-34 – 24.4%), students and pupils (31.6%), and those with vocational education (28.1%).

Cooperation between military units and schools in the municipalities takes the form of discussions, lectures, presentations conducted during open days at schools, as well as school field trips, sports competitions and youth camps. Sometimes soldiers participate in organising free time activities for the pupils, or perform work for the school. In each of the municipalities a large percentage of the respondents indicated that the presence of a military unit contributes to the upbringing of young people (Hrubieszów 59.5%, Brzeg 50.8%, Braniewo 47.8%, Chełmno 39.7%, Słupsk 36.7%). This was equally noticed by men (42.3%) and women (41.8%) participating in the survey. This dependence was indicated by respondents of all ages (18-34 years – 47.0% of this group, 35-54 years – 35.4%, 55-75 years – 43.2%, over 75 years – 45.6%)

regardless of the occupational situation (employed 37.8%, unemployed 38.6%, pensioners 43.9%). However, the highest percentage of such answers was recorded in the group of students and pupils (94.7%).

## Discussion and Summary

Opinions of the residents participating in the survey from the Hrubieszów and Braniewo municipalities often differed from those of respondents from other municipalities. While answering the questions concerning the influence of the military unit on the socio-economic situation in their municipality in the context of the regional development, the respondents used the whole range of the measurement scale, taking an unambiguous position. Referring to the variables on the basis of which the socio-economic situation of Hrubieszów and Braniewo was characterised, it is worth noting that in some respects these municipalities were similar (population, labour market, changes in the entities of the national economy).

In the case of questions regarding the relationships between a military unit and entities in its environment and the impact of the unit on the quality of life of the residents, the answer "hard to say" was found among respondents from each municipality. However, the largest percentage of such answers was noted in the Słupsk, Chełmno and Brzeg municipalities. The respondents' opinions regarding the relationships of a military unit with its environment corresponded with their opinions regarding the influence of the unit on the socio-economic situation in a municipality. Statistically significant relationships also occurred between the respondents' opinions and the following variables: age, employment status and education.

Studies on the relationships between military units and entities of the local environment have been conducted by the authors since 2009. In 2011, the following relationships were established as a result of these studies, considering the municipalities regarded in this article as well: the residents of the Braniewo and Hrubieszów municipalities most often emphasised that the relationships of military units with local entities are positive; 86% and 82%, respectively. In the Słupsk, Brzeg and Chełmno municipalities, positive opinions were expressed by a slightly smaller number of the residents (76%, 72%, 64%, respectively). In the context of the impact of a military unit on the quality of life of the residents, most of the respondents who noticed this relationship lived in Braniewo (78%) and Hrubieszów (70%). Respondents' answers in this respect were slightly different in other municipalities: Słupsk (42%), Brzeg (40%), Chełmno (32%).

Results of the surveys conducted in 2017 indicate that in urban municipalities: Braniewo and Hrubieszów, the respondents more often than in other cities indicate the importance of the army for the labour market and population influx. In this context it is worth noting that the place and importance of a military unit in the local community is determined by a number of internal

and external elements, mentioned above. Among these elements, the assessment of the army by residents is conditioned by the size of the staff in a unit, which determines the needs of soldiers and military personnel for products and services offered by local entities, and defines their purchasing power. Moreover, the assessment is conditioned by the size of the city, – its potential population, and economic structure. The bigger the demographic potential and the stronger and more diversified the economic structure, the harder it is to clearly determine the influence of the military unit on the socio-economic situation of a municipality in the context of its potential development. Surveys conducted so far indicate that the assessment of a military unit by the residents is conditioned by the location of the town. The closer to the eastern border of Poland, the more often the ratings are positive.

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