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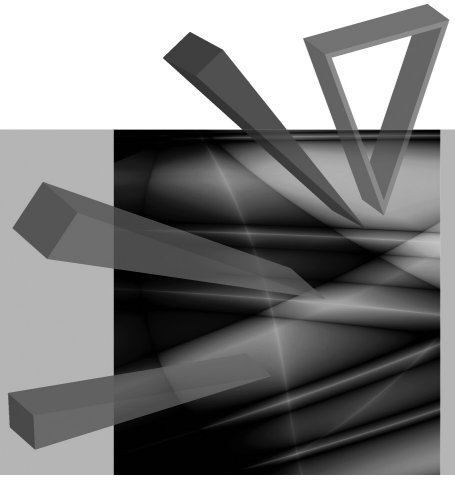
282

Local Economy in Theory and Practice
Planning and Evaluation Aspects



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Publishing House of Wrocław University of Economics
Wrocław 2013

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Layout: Barbara Łopusiewicz

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Typesetting: Adam Dębski

Cover design: Beata Dębska

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Information on submitting and reviewing papers is available on
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www.wydawnictwo.ue.wroc.pl

ISSN 1899-3192
ISBN 978-83-7695-329-8

The original version: printed

Printing: Printing House TOTEM

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PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU
RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS nr 282 • 2013

Local Economy in Theory and Practice
Planning and Evaluation Aspects

ISSN 1899-3192

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RURAL DEVELOPMENT IN TERMS OF ECONOMIC SUPPORT – A CASE STUDY FROM THE CZECH REPUBLIC*

Summary: The aim of the article is to evaluate the relationship between the prosperity of communities and receiving subsidies from the EU, namely the role played by subsidies from the EU in the development strategy of rural communities. The article analyzes receiving subsidies and the prosperity of the municipality defined as surplus population growth in the municipality in the period. The work is also focused on what effect the human potential of communities has on using EU funds. We would like to answer the question of how the character and activity of the local population is correlative with the active economic behaviour of the municipality in the form of receiving subsidies.

Keywords: rural municipalities, municipal finance, strategies, development.

1. Introduction

Rural areas represent 91% of the 27 European Union Member States and are home to more than 56% of its population, making the rural development policy of paramount importance. In the past, rural areas (countryside) meant a rural farming and agricultural policy, and since 2000, when the European Union introduced in the Action Agenda 2000, the concept of rural development and the issue of rural development has been coming to the fore as a separate issue [*Agenda 2000*, pp. 11––12]. The European Union is trying to reduce interregional disparities and resolve problems with its main instruments of economic and social cohesion, which are the EU funds.

* This work builds on the results of the project NAZV „Rural space – a space for living or survival?“ NAZV QI 92A023. Further, the work is also a part of the project “Institutional approaches to regional development” GA JU 029/11/S GA whose objective is to formulate a mechanism, direction and rate effects of institutional factors on the development of local government units in the Czech Republic.

For the first time, the measures for rural areas were applied in the programming period 2000–2006 [Hrabánková 1999, p. 52]. The objective of the EU policy on rural development is solving rural problems, and the use of their potential. Many rural areas face considerable challenges. A particular problem not only in our country, but also in most European Union countries, is the rural exodus. Rural exodus is one of the syndromes of global change, which could be called syndromes of exploitation or depletion syndromes. Rural exodus is associated with the deterioration of the environment and development issues that have caused the abandonment of traditional agricultural practices, especially long-term land use. The main causes of rural exodus include the lack of jobs and the lack of civic, cultural and technical facilities in comparison with the cities. Some municipalities are trying to address these problems by improving their facilities and economic potential through various grants from the European Union as well as subsidies from the state budget [Rural Development… 2008].

Rural issues have been analyzed by many authors [Perlín 2003, pp. 113–120; Slepička 1981, p. 26; Majerová 2005, p. 39] and institutions [CZSO 2008; OECD 2009; European Commission 2011], whether for theoretical-scientific, or purely practical (e. g. rural definition in order to target various development programmes) reasons. An initial view on the definition of rural differs from the point of view of various disciplines, the perception of rural in individual countries and regions is also different.

There are many definitions of rural areas (classifications of United Nations, European Union and many others). The most commonly used definition is the OECD definition. In order to perform the analysis of regional economies, it was necessary to take into account the geographic location of the region. The OECD put into practice the regional typology, according to which the regions were categorized as predominantly urban, predominantly rural and intermediate using three criteria:

- density of population: a community is defined as rural if its population density is less than 150 inhabitants per km^2;
- the degree of rurality: the region is classified as predominantly rural, where more than 50% of the population live in rural areas, a mostly urban region is one in which live less than 15% of the urban population, and intermediate is one where the proportion of the population living in rural areas is between 15 to 50%;
- the size of the urban centre: the region is predominantly urban if the proportion of the population living in rural local units is less than 15%, an intermediate region, where the proportion of the population living in rural local units is between 15–50 % and a predominantly rural region where the proportion of the population living in rural local units is greater than 50%;
- the size, characteristics and composition of the rural economy [OECD 2010, pp. 2–4].

In the Czech Republic there are significantly and predominantly rural regions of 9,050,006 inhabitants, i.e. 88.6% of the population, and 78,370 square kilometres, i.e. 99.4% of the territory [Rural Development… 2008, p. 15].

Figure 1. Map of the Czech Republic: definition of rural regions as NUTS 3 according to the OECD typology

Source: Rural Development Plan, the Czech Republic for the period 2007–2013, 2010.

For the definition of rural municipalities in the Czech Republic, a statistical limit up to 2000 inhabitants is used. Therefore, municipalities with smaller populations in the Czech Republic are considered as rural. However, there are also a number of typical villages where the population has increased, and by this criterion they are not classified as rural community, although they are not cities. Most of such districts can be found in South Moravia and Ostrava [Perlín 2008].

A rural area was perceived in the past as, first of all, a base for the agricultural sector, and most of the rural population was employed in agriculture. For this reason, agricultural policy was also considered as a sufficient regional policy for the rural area [Mahé, Ortalo-Magné 1999, pp. 87–131].

However, current trends indicate that, due to rapid changes in the international economy, rural areas face several evident threats, but also significant opportunities. The opportunities in rural areas include globalization and its effects, better communication in terms of information technology improvement, reduction of

transport costs, change of the ingrained patterns of trade and increasing the weight of non-agricultural activities in rural areas [OECD 2006, pp. 22–31].

So the question is how to adapt the current strategy of rural development policy, so as to lead to the optimal state in rural areas in the long term. In connection with this, there is the general problem of how to define the optimal conditions in rural areas [Pělucha, Viktor, Bednaříková 2009, pp. 66–67].

In our article we will use the OECD definition (2010) – 2000 inhabitants and the population density of 150 inhabitants per square km.

The goal is to evaluate the relationship between the prosperity of the municipality and drawing funds from the European Union. In other words, what is the role of subsidies from the EU's development strategy in rural communities?

The work examines the hypothesis, whether there is a link between the prosperity of municipalities (in terms of population growth in the ten-year period under review) and drawing the EU subsidies – whether the prosperous municipalities are really much better at drawing subsidies than the less prosperous ones.

2. Materials and methods

Rural municipalities of the Czech Republic were defined according to the commonly used OECD criteria (population density below 150 inhabitants/km^2, population less than 2000) in the period 1995–2009, defined above.

The basic characteristics of population development (gross rate of population, gross rate of migration) were used to divide the whole set of rural municipalities into clusters with similar demographical characteristics. The application of the demographical criterion mentioned above, formed five different groups of municipalities in terms of population development in the period 1995–2009. These groups were selected by using a cluster analysis based on the chronological average gross rate of population and net migration rates.

2.1. Statistical methodology

Given the fact that the vast majority of data was obtained by the questionnaire survey and structured interviews of a categorical character, the appropriate methods were chosen for the statistical evaluation. A statistical analysis of the result was carried out by the SPSS program. In the first phase of the evaluation, the analysis of relationships in the Pivot Tables was carried out. The dependence observed for two variables can be either symmetrical (mutual) or asymmetrical (unilateral). The basic test used to detect the interdependence of two categorical characters is the chi-square test of independence.

During the test we followed the subsequent assumption. If two characters are independent, then the distribution of frequencies in the Pivot Table is proportional to the line and column marginal frequencies ni+ or n + j. We tested the congruence of the observed and expected frequencies. For monitoring the intensity (power) of

dependence various coefficients were used, which usually take the values from the interval (0,1) or (−1,1) when the value of 0 means independence. Other tests are the tests where the coefficients are zero. If we could not use the chí-square test in the contingency table, then we used the so called exact tests. For example, Fisher's exact test [Everitt 2001].

2.2. Sociological methodology

To gain more information about the development within our clusters of villages an indicator of average gross rate of population and net migration rates was used. We completed our research with a questionnaire survey of rural population.

The questionnaire survey was conducted by the FOCUS agency in autumn 2010. The four clusters of villages mentioned above were used as a basic file for the survey. The total number of random selected villages was 100, 10 respondents in each village. One thousand respondents from one hundred randomly selected villages were asked about their living conditions in their village in the broadest sense. The data gained from the questionnaire survey were used as a source for the analyses of different aspects of social and human capital among our four defined clusters of villages. In twenty randomly selected municipalities structured interviews with mayors were carried out in order to determine municipal development strategy.

3. Results

We obtained five different groups of municipalities in terms of population development in the period 1995–2009. These groups were tentatively named as follows:

1) municipalities gaining from migration,
2) municipalities losing to migration,
3) municipalities naturally shrinking,
4) municipalities significantly gaining from migration,
5) unstable municipalities.

Cluster 1 – tentatively named as "municipalities gaining from migration" – represents 1369 municipalities with small, natural decreases and small migration gains in the long-term (within a few numbers per mile).

Cluster 2 – tentatively named as "municipalities losing to migration"– consists of 843 municipalities, showing negative values of both chronological averages.

Cluster 3 – tentatively named as "municipalities naturally shrinking" – consists of 815 municipalities showing a long-term natural decrease and low migration gains.

Cluster 4 – tentatively named as "municipalities significantly gaining from migration" – consists of 628 municipalities, showing the trend of natural decreases and significant migration gains.

Cluster 5 – tentatively named as "unstable municipalities" – represents the smallest group of 26 municipalities. This group has an extreme value of natural

population decrease and at the same time extreme migration gains. As to the insignificant number of municipalities, we excluded this cluster from our further analyses. The fifth cluster was not included due to its "extremity" included to the survey.

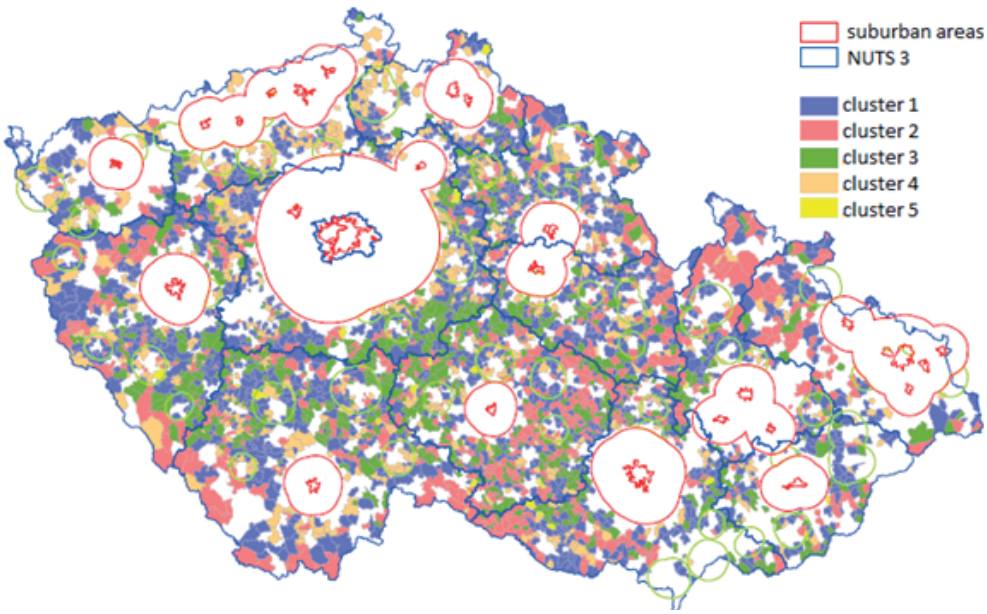

Figure 2. Map of the Czech Republic: groups of municipalities

Source: Czech Statistical Office, NAZV research data.

The selected 100 municipalities were represented by four clusters with the following number of municipalities: cluster 1: 39 municipalities, cluster 2: 15 municipalities, cluster 3: 29 municipalities and cluster 4: 17 municipalities.

Based on the survey, which was carried out within the NAZV project, the municipalities were divided according to the above typology and analyzed according to subsidies received from programming tools 25–54 in the period 2007–2013 (data for 2007–the first half of 2012) [National Development Plan 2006].

For a more detailed interpretation of the relationship between receiving subsidies and municipal prosperity, we used the information about the strategies of selected mayors of 20 municipalities, who were approached in structured interviews as the representatives of the clusters.

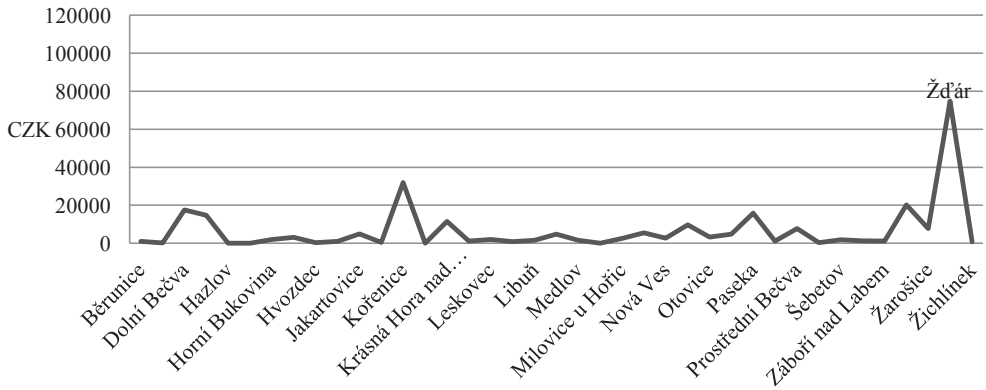

Figure 3. Cluster 1: Average amount of received subsidies from programming tools 25–54, in the period between 2007 and the first half of 2012 in municipalities *per capita*

Source: NAZV research, Ministry of Finance, own research data.

In this cluster, municipalities with a population of 800 to 1 200 people are ranked. There are also several municipalities with a population of between 300 and 1600 inhabitants.

Four municipalities did not receive any subsidies at all. Their population numbers are as follows: 144, 299, 344 and 1 640. The budgets of municipalities with low levels of population are small, and most mayors do not set about investment because of co-financing. The European Union provides only partial funding, the rest must be paid by the municipality or the county or the state from its budget. In most subsidies it is necessary to finance that part from the municipal budget and the mayors do not want to withhold.

The most extreme is the municipality of Žďár with 1257 inhabitants and the 2007–2013 grants totalling 94 million CZK. This municipality has drawn most of the amount, almost 90 million CZK, to build the first part of a sewage system, the rest for technical improvements in the nursery and the primary school.

Most municipalities in this group drew on a *per capita* up to 10 000 CZK; only Lužice, a village with just 38 inhabitants, did not draw any subsidies.

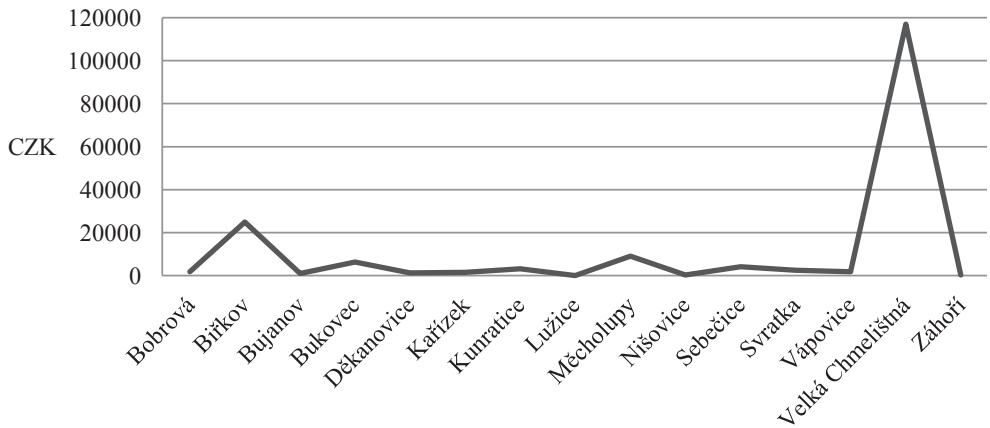

Figure 4. Cluster 2: Average amount of received subsidies from programming tools 25–54 in the period between 2007 and the first half of 2012 in municipalities *per capita*

Source: NAZV research, Ministry of Finance, own research data.

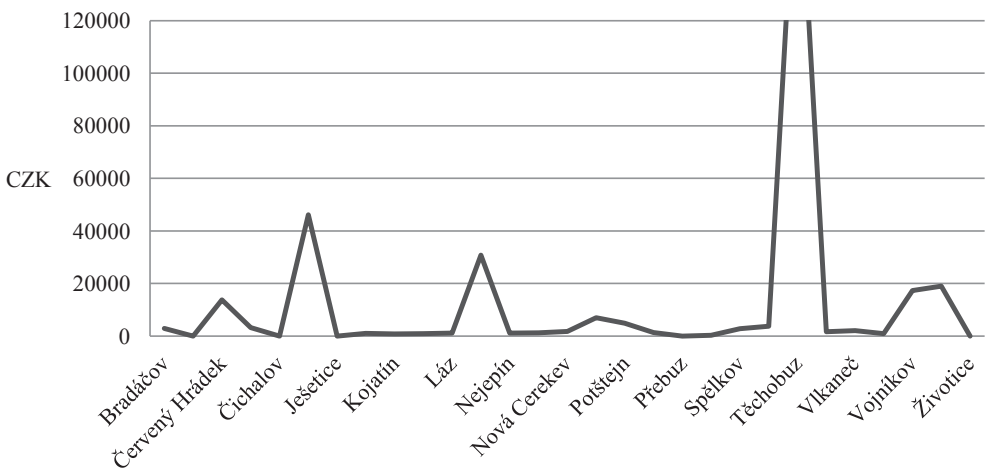

Figure 5. Cluster 3: Average amount of received subsidies from programming tools 25–54 in the period between 2007 and the first half of 2012 in municipalities *per capita*

Source: NAZV research, Ministry of Finance, own research data.

The largest amount in the reporting period was obtained by Bukovec – 9 million CZK, although in *per capita* terms this high amount is not apparent. This village received grants for the technical evaluation of schools, technical infrastructure, and tourism. Bukovec is the easternmost municipality of the Republic, which it uses as its advantage and the development of the community and all the activities are oriented on this.

Another municipality which drew a very large amount *per capita* is Velká Chmelištná with almost 120 000 CZK *per capita*. This is due to the very low number of inhabitants in the village – 50.

The third group of municipalities is the standard in drawing subsidies of 20 000 CZK. The group also displayed the highest number of municipalities that accrued to any subsidy; it contains municipalities with a population of between 48 and 147. These municipalities did not receive money for the same reasons as the above mentioned municipalities in cluster one.

The largest grant of about 25 million CZK was received by Těchobuz, a village with 128 inhabitants. The subsidies were used for the development of technical infrastructure in the village.

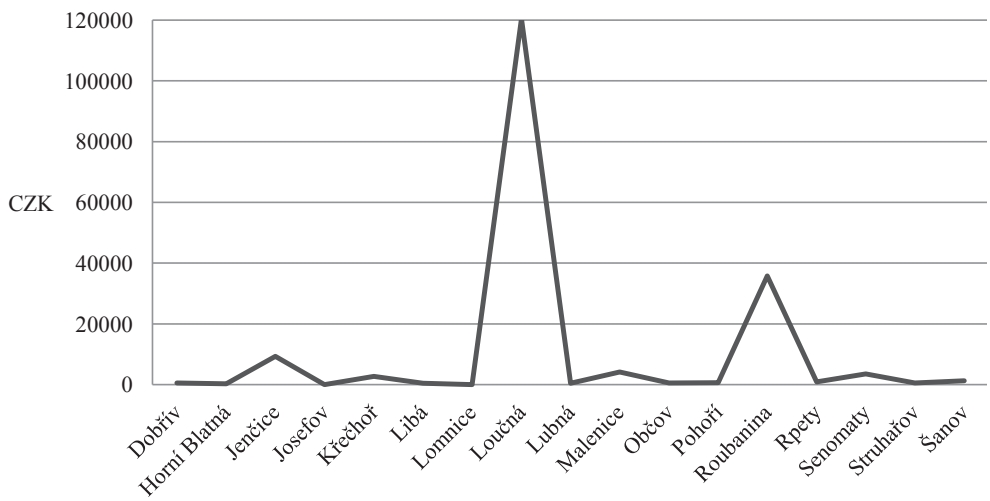

Figure 6. Cluster 4: Average amount of received subsidies from programming tools 25–54 in the period between 2007 and the first half of 2012 in municipalities *per capita*

Source: NAZV research, Ministry of Finance, own research data.

The fourth group of municipalities has the average amount received *per capita*, 600 CZK. Two of the villages are outside the average. A village with 87 inhabitants, Loučná, received a total amount of 10.4 million CZK and 120 000 CZK *per capita*, and the village of Roubanina with 134 inhabitants, a total amount of 4.8 million and almost 38 000 CZK *per capita*. The village of Roubanina used the subsidies mainly on road reconstruction and the village of Loučná for a sewage system and sewage treatment plant.

4. Discussion and conclusion

The result of the negative evaluation which holds back municipalities from their development is that the most significant barrier is the lack of funds. The lack of funds is mentioned by all municipalities except cluster 1 "municipalities gaining from migration". In the case of cluster 2 and 3, there are small municipalities, where it is difficult to gain access to subsidies. This corresponds to the conclusions of the analysis of the fiscal situation of rural communities.

The bad financial situation of these municipalities may be the result of their decision to separate from the mainframe municipalities after 2002. As a counterpoint to the centrifugal tendencies, one can currently see the association of municipalities in municipal or local action groups (LAGs), so that they can apply for European funding.

Out of the hundreds of municipalities that were analyzed on the issue of drawing subsidies from the European Union, 20 municipalities were selected, where in the form of structured interviews, it was examined whether it is possible to confirm the findings obtained through the analysis of population growth and budgets.

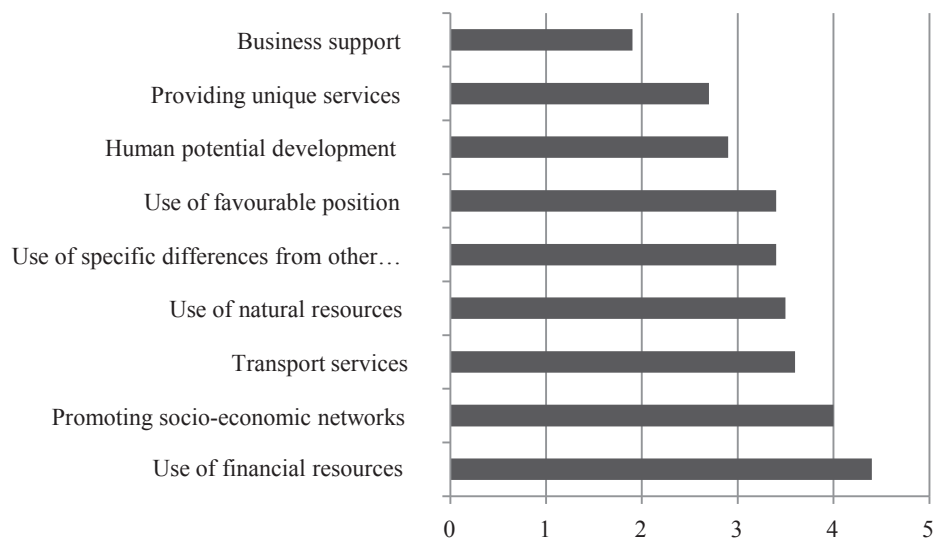

Figure 7. Suggested municipal strategies (average evaluation)

Source: NAZV research data.

The mayors of municipalities, in terms of community development strategies, used the strategy focused on financial management the most (acquisition and use of financial resources). The other used strategies, in terms of their importance, was the promotion of socio-economic networks (i.e. the establishment of associations

of municipalities with subsequent requests for support) and the provision of transport services. These two strategies are closely connected, intertwined, because participation in social networks of the LAG type and municipal associations, are the main means of raising finance in the form of subsidies. The transport services strategy comprises the promotion of employment and retaining people in the village, where there are no jobs and most people are forced to commute to work. Approximately the same average assessment was obtained from three other strategies - the use of natural resources, specific differences and favourable position.

The strategy focused on the use of financial resources, evaluated by the highest average, is in terms of the observed characteristics (net migration and natural increase) the most implemented in the pro-growth clusters 1 – the municipalities gaining from migration and cluster 4 – the municipalities significantly gaining from migration. Municipalities in cluster 1 are also developing public transport, and utilize their favourable location in terms of proximity to cities.

For cluster 4, in addition to the use of the financial resources strategy, the support of social networking and the relatively high valued use of natural resources is characteristic. This suggests a developed entrepreneurial spirit of this cluster focused more on the use of their resources (compared to cluster 1, there is not a developed strategy for the promotion of business). The municipalities of cluster 2, benefit from the proximity of agglomeration (the strategy of the use of the favourable position) and cross-linking efforts with other entities (e.g. the use of LAG and the strategy of promoting socio-economic networks).

For cluster 3, typical strategies are the use of financial resources and the specific differences from other places. The low rating of the favourable position strategy, shows, compared to other municipalities, the considerable weakness characteristic for the described cluster.

We are, of course, aware that the prosperity of rural areas is not affected by only economic factors, but others as well, but those are not the subject of this article. The book "Rural area as a place for living" and other output from the NAZV grant "Rural space as a space for living or survival" can be discussed in detail in further studies.

Our results did not confirm the issue of the link between prosperity and receiving subsidies. Although the scope and structure of local finance is to some extent dependent on the management of municipalities, due to the relatively low income autonomy of communities and due to the applied system of local government, the redistributive processes have a decisive influence in the budgetary system, which are in terms of municipalities the external factors. This creates an environment in which the municipalities make decisions and work.

Tax revenues, despite the importance of subsidies, are the most important income of communities. Their significance does not only come from their share of income, but also from, unlike subsidies, their non-specific character. The amount of tax revenue of municipalities in the Czech Republic in the monitored period was

affected by two main factors: individual income taxes and budget specifying taxes. Tax revenue was based largely on tax sharing.

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ROZWÓJ OBSZARÓW WIEJSKICH W WARUNKACH WSPARCIA GOSPODARCZEGO. STUDIUM PRZYPADKU Z REPUBLIKI CZESKIEJ

Streszczenie: Celem artykułu jest ocena związku między prosperity gmin a otrzymywaniem przez nie środków z Unii Europejskiej, a także roli, jaką pełnią one w strategii rozwoju gminy wiejskiej. W artykule analizie poddano proces pozyskiwania tych środków i prosperity gminy zdefiniowane jako nadwyżkę przyrostu naturalnego w gminie mającą miejsce w określonym czasie. Praca porusza także zagadnienie wpływu środków pochodzących z Unii Europejskiej na potencjał ludzki gmin. Autorzy dążą do udzielenia odpowiedzi na pytanie, jak specyfika i aktywność społeczności lokalnej jest skorelowana z aktywnością samorządu lokalnego w zakresie pozyskiwania środków pomocowych.

Słowa kluczowe: gminy wiejskie, finanse lokalne, strategie, rozwój.