Tomasz Wolowiec[1]

INSTRUMENTS OF STIMULATING ENTREPRENEURSHIP BY LOCAL GOVERNMENT UNITS (CASE OF PODKARPACKIE PROVINCE COMMUNES)

This article diagnoses the use of instruments supporting entrepreneurship by Podkarpackie province communes. The main research problem was formulated as follows: Do the instruments of supporting entrepreneurship used by self-government affect the development of economic initiatives in the area of the surveyed communes? We analyzed it in two areas. The first one focuses on the present state, analyzing the quality and directions of actions taken by commune authorities in supporting economic initiatives as well as their results. The second one attempts at pointing the solutions conducive to enterprise development and instruments ensuring their stimulation. The main problem is accompanied by a number of detailed questions about the most frequent and effective support forms, the reasons behind their choice, the assumptions of constructed development strategies and investments made to improve the conditions of conducting business activities.

Keywords: *local self-government; enterpreneurship.*

JEL Classification: *E27, H71, H76, O18, R10.*

Томаш Воловець

ІНСТРУМЕНТИ СТИМУЛЮВАННЯ ПІДПРИЄМНИЦТВА ОРГАНАМИ МІСЦЕВОГО САМОУПРАВЛІННЯ (НА ПРИКЛАДІ ГРОМАД ПІДКАРПАТСЬКОЇ ОБЛАСТІ ПОЛЬЩІ)

У статті досліджено інструменти підтримки підприємництва у громадах Підкарпатської області Польщі. Основний предмет дослідження формулюється так: чи впливають інструменти підтримки підприємництва, що використовуються органами самоврядування, на розвиток економічних ініціатив у даному регіоні? Аналіз проведено у двох сферах. У першій досліджено поточний стан, якість і напрям дій, виконаних місцевими керівними органами для підтримки економічних ініціатив, а також їх результати. У другій — зроблено спробу знайти рішення для розвитку підприємств і інструменти стимулювання їх діяльності. Детально розглянуто питання найбільш часто використовуваних і ефективних форм підтримки, причини їх вибору, розробки стратегій розвитку і інвестицій для покращення умов ведення бізнесу.

Ключові слова: *місцеве самоврядування, підприємництво.*

Томаш Воловец

ИНСТРУМЕНТЫ СТИМУЛИРОВАНИЯ ПРЕДПРИНИМАТЕЛЬСТВА ОРГАНАМИ МЕСТНОГО САМОУПРАВЛЕНИЯ (НА ПРИМЕРЕ ОБЩИН ПОДКАРПАТСКОЙ ОБЛАСТИ ПОЛЬШИ)

В статье исследованы инструменты поддержки предпринимательства в общинах Подкарпатской области Польши. Основной предмет исследования формулируется так: влияют ли инструменты поддержки предпринимательства, используемые органами самоуправления, на развитие экономических инициатив в рассматриваемом регионе? Анализ проведен в двух сферах. В первой исследовано текущее состояние, качество и

[1] PhD, Chair of Microeconimics, University of Information Technology and Management in Rzeszow, Vice Director of the Institute of Financial Research and Analyses in Rzeszow, Poland.

направление действий, предпринятых местными руководящими органами для поддержки экономических инициатив, а также их результаты. Во второй — предпринята попытка найти решения для развития предприятий и инструменты стимулирования их деятельности. Подробно рассмотрены вопросы наиболее часто используемых и эффективных форм поддержки, причины их выбора, разработки стратегий развития и инвестиций для улучшения условий ведения бизнеса.

Ключевые слова: *местное самоуправление, предпринимательство.*

Introduction. Social and economic development of each country is closely tied to cooperation between self-government administration and local entrepreneurs' community. Research conducted at the local level indicates strong relationship between the specificity of self-government budget policies and the development of entrepreneurship. This issue was discussed in the analytical works of G. Carlino and E. S. Mills, T. J. Bartik, as well as D. Carlton and L. E. Papke. They all emphasize a close connection between the policy of local authorities and location decisions made by businesses. According to the opinion expressed by D. Bondonio, creating and stimulating development of enterprising environment of self-government communities is an important phenomenon for many reasons, each of them playing a different role in shaping firm and stable social and economic structures. This view is also shared by T. F. Buss, who claims that the key to effective entrepreneurship support is to perceive the significance of its development for local communities and to demonstrate to local authorities the benefits resulting from its stimulation.

The three-stage territorial division of the state is integrally connected with decentralization of competencies related to supporting economic initiatives. This issue is strongly emphasized by, among others, W. Misiag and D. Grodzka. The consequence of the currently functioning solution is that the central weight has been shifted to the lowest stage of territorial self-government units (Polish acronym - JST), namely the commune level, as far as the creation of business conditions is concerned. Gathered experiences (B. Slominska, U. Klosiewicz-Gorecka and B. Slominska, T. Sadowska, J. Kondratowicz-Pozorska) confirm that the type of the development policy adopted by self-governments accounts for the fact that the possibilities available in this area are only partially used. It is necessary to establish both the directions of desired changes in the policy of managing local finances as well as to indicate the aims and the tools for their achievement. It is extremely vital to determine the key forms and methods of stimulating the development of economic initiatives, as well as to determine the specificity of these actions through adjusting them to the profile of the relevant self-government unit. These issues will constitute the subject of this article.

The research problem and the methodology. This article is a diagnostics of Podkarpackie province communes as far as the use of instruments supporting entrepreneurship is concerned. The article defines one main research problem and a series of detailed questions which expand on the main problem. The set of questions we obtained in this way enabled us to direct our empirical analyses correctly. The main research problem was formulated in the following question: Do the instruments of supporting entrepreneurship used by self-government affect the development of economic initiatives in the area of the surveyed communes? The adopted research problem is described by two areas in which its analysis should be performed. The first one

is the diagnosis of the present state. It covers the analysis of the quality and the directions of the present actions taken by commune authorities in supporting economic initiatives as well as their results. The second dimension is an attempt at pointing the solutions conducive to enterprise development and instruments ensuring their stimulation. The main problem defined in this way is accompanied by a number of detailed questions concerning, for example, the most frequently used instruments and the reasons behind their choice, the most effective support forms, the assumptions of constructed development strategies, as well as investments made to improve the conditions of conducting business activities. The research process initiated in this way has allowed us verify the characteristics of the analyzed communes as regards the solutions used by them to support entrepreneurship. This has also allowed us group dominant directions and solutions supporting economic initiatives taken up by the self-government.

The analysis of the instruments applied to support entrepreneurship and their effectiveness required adoption of time framework enabling us to examine the relation between the activities of self-governments and measurable effects of the undertaken initiatives. The time horizon of the analysis covered years 2006-2009 inclusive. The verification of the scope of application and effectiveness of particular support forms used by JST required transformation of the concepts in which research problems were formulated into variables. The independent variable were the instruments of supporting entrepreneurship by communes, catalogued into 3 groups: infrastructural instruments, legal and organizational instruments and promotional instruments.

The territorial dimension of the conducted analyses covered the area of Podkarpackie province, located in the South-East of Poland. The research sample reflecting the population structure had the layer and proportional characteristics. Each layer corresponded with the type of commune. The size of the research sample was chosen so as the percentage of each category of analyzed communes corresponded with the percentage of such communes in the province, namely: rural, urban, town-and-country communes, as well as cities with district rights. In the layers selected in this way, we conducted the samplings, following the scheme of the sampling without replacement. The chosen sample consisted of 61 communes (including 7 urban communes (2 of them were cities with district rights), 11 town and country communes and 43 rural communes).

The diversity of the factors influencing the development of entrepreneurship accounted for the fact that each determinant affecting entrepreneurship was evaluated on the basis of the established scale of correlation power verified over the 4 years analyzed. The scale reflecting the direction and power of correlation between parameters reflecting instruments of supporting entrepreneurship and parameters reflecting the effects of applying particular support forms covered graduation of the relationship power. The analysis covered the direction and power of the relationship between applying a particular instrument and the effects invoked by it (that is whether it contributed to the support of entrepreneurship, and if so, to what extent).

The adopted method was divided into two stages. The first stage was the static analysis for each year separately, using the linear correlation coefficient. It examines the existence of a relation between the use of particular instruments of supporting entrepreneurship and the effects of these activities. At the second stage we focused on

the analysis covering the whole examined period, due to the fact that the instrument used in 2006 could affect the conditions of enterprise development not only in 2006 but also in the next years. Therefore, it was necessary to verify the influence of a given instrument on the development of entrepreneurship in the whole examined period.

Formula 1. **The measure of correlation between variables (CM)**

$$CM = \sum_{i=1}^{4} \alpha_i r_i$$

Source: own elaboration.

Determining weights $_i$ we adopted the following assumptions:

1st *assumption*: $\alpha_i \geq 0$. (α=1,2,3,4). It was assumed that weights α_i take the values of above zero or zero, which means that the instrument applied in a particular year influenced or did not influence the development of entrepreneurship, while it did not have negative influence (its use did not worsen the conditions of conducting economic activities).

2nd *assumption*: $\sum_{i=2}^{4} \alpha_i = 1$. It was assumed that the sum of α_i coefficients for the whole analyzed period *(i = 1,2,3,4)* equals *1 - (α_1+α_2+α_3+$\alpha_{4=}$1)*.

Defining the measure of correlation (CM) we assumed that CM $\in$ [-1; 1] and is

$$-1 \leq \sum_{i=1}^{4} \alpha_i r_i \leq 1.$$

contained in the same range as the linear correlation coefficient r_i — therefore:

In order to establish the numerical value α_i we adopted the following line of thinking: as the instrument used in *i*-th year influenced the ratio describing the development of entrepreneurship in that year and in the next years, therefore the direction and correlation in the analyzed year were also influenced by the actions taken in previous years. Detailed assumptions concerning the activities taken in a particular period and their influence on the development of entrepreneurship in consecutive years are presented in Table 1.

Table 1. **Actions concerning support of economic initiatives and their influence on entrepreneurship development**

Actions taken / Influence	2006	2007	2008	2009	Total
2006	+	—	—	—	1
2007	+	+	—	—	2
2008	+	+	+	—	3
2009	+	+	+	+	4
Total					10

Source: Own elaboration.

The first year of the analyzed period was 2006, thus the use of support instruments brought the weakest effects. Then, respectively, each consecutive year in which communes supported entrepreneurship, brought better results, as there were new instruments and the sum of instruments from previous years active in it. This leads us

to the assumption that $\alpha_1 \le \alpha_2 \le \alpha_3 \le \alpha_4$. Taking into consideration the above, we adopted the assumption that $\alpha_1=0,1;\ \alpha_2=0,1;\ \alpha_3=0,1;\ \alpha_4=0,1$.

Depending on the value of CM, we assumed the following scale of correlation:

1. Very strong correlation, when $0,9 \le |CM| \le 1$,
2. Strong correlation, when $0,75 \le |CM| < 0,9$,
3. Weak correlation, when $0,25 \le |CM| < 0,75$,
4. Very weak correlation, when $0 < |CM| < 0,25$,
5. Lack of correlation, when $|CM| = 0$.

In case when the correlation coefficient for a given pair of variables in the analyzed period did not have the stable sign, *CM* was not established as positive and negative values would neutralize each other. In such situation we interpreted only correlation coefficients for each year separately.

The analysis of the influence of the independent variables on the dependent ones also took into account verification of quality parameters corresponding to the instruments of supporting entrepreneurship used by communes. Similarly to quantity data, quality parameters were analyzed in relation to the dependent variables describing the development of entrepreneurship. Due to the fact that in qualitative research we resign from the postulate of sample representativeness (creating possibilities of wide generalizations) and reliability (allowing us to repeat the survey using the same tool), the choice of variables was governed by the specificity of a particular survey (Bauman).

To evaluate the influence of using the above instruments on dependent variables we used the tests for significance of differences for independent variables. These tests verified whether the differences appearing between two or more compared groups were statistically significant. As a result, the algorithm for choosing the test of significance of differences pointed to the Kolmogorov-Smirnov test (see Diagram 1).

Diagram 1. **The hypothesis about the conformity of both samples against the alternative hypothesis**

$\mathbf{H_0}$: $m_N = m_S$ (means in analyzed groups are equal)

against alternative hypothesis:

$\mathbf{H_1}$: $m_N \neq m_S$ (means in analyzed groups in a statistically significant way differ)

Where:

m_S — mean established for a given dependent variable in a group using a given instrument;

m_N — mean established for a given dependent variable in a group not using a given instrument.

Source: Own elaboration.

The rejection of the null hypothesis H_0 for the alternative hypothesis H_1 on the significance level of 0.05 meant there was some influence of a particular instrument on a dependent variable. The evaluation of the influence of each instrument on dependent variables was made on the basis of evaluating average values for the analyzed groups. The analysis incorporated establishing average values of dependent variables both for communes which used ($\overline{x_S}$) and those which did not use ($\overline{x_N}$) a partic-

ular instrument, and also evaluating the significance level *p*, at which the null hypothesis was rejected in favor of the alternative hypothesis, or when there were no grounds for rejecting the null hypothesis. The effectiveness of the instrument was confirmed by dependent variables for which there was statistically significant difference between means, proving the influence of using a particular instrument on the development of entrepreneurship in the area of Podkarpackie province communes.

The scope of using infrastructural instruments by commune self-governments. One of the vital determinants of the development of economic initiatives are infrastructure conditions. More than 70% of communes believe that a good state of technical infrastructure is a determining factor when locating economic entities and a factor stimulating the development of entrepreneurial initiatives. Nearly 23.5% of communes claimed that the construction and/or modernization of infrastructure is also a manifestation of local authorities' activities for a community. The calculated correlation between the independent variable, that is the level and quality of commune infrastructure and dependent variables (describing the development of entrepreneurship) indicated the existence of a relationship between technical infrastructure and the number of economic entities. The direction of this correlation informs us that the initiatives aiming at building, developing or modernizing infrastructure are a determining factor in development of economic initiatives. This is confirmed by the calculated CM = 0.73. The values of CM describing the relation between the used instrument and other independent variables were on a slightly lower level.

The presented values of CM clearly demonstrate that technical infrastructure is not the strongest determinant shaping the business environment in a commune. Among the parameters describing conditions of conducting economic activity in surveyed communes, the most positive ones are those of telephone connections and communication infrastructure (respectively 76.6% and 57.45% of positive comments). The next two factors determining the level of local entrepreneurship are the availability of utilities, that is gas, electricity, water (55.32% of positive marks) and availability of attractive land for investment (51.06% of positive indications).

The presented findings compared with the data concerning the amount of money allocated in the analyzed period for expenditure in infrastructure allow stating that a considerable part of the analyzed communes still have great needs and are forced to maintain investment continuity. Among all the surveyed communes, nearly 62% indicated that they used investment instruments to support entrepreneurship. Simultaneously, nearly 60% joined initiatives assuming co-financing development ventures. For this purpose, JST took up some forms of inter-commune cooperation and joined the initiatives of local organizations of entrepreneurship support. The cooperation between the sectors was confirmed by as many as 49% of the sampled communes.

The scope of using legal and organizational instruments by Podkarpackie communes. A special group of instruments are those constituting legal and organizational form of supporting entrepreneurship. This category is undoubtedly the richest and widest, incorporating diverse instruments. Here we could place the local law tools, organizational instruments and institutional solutions. For our discussion, of key importance here are expenditure instruments, especially the category of property expenditure. The analysis of collected material indicated very strong correlation

between the application of characterized support forms and variables describing the development of entrepreneurship. The calculated CM showed that using the above instrument best translated into the number of people employed in the commune (CM = 0.98) and mobility of production factors (CM = 0.97). A very strong correlation also characterized the dependence between expenditure on property and the number of economic entities (CM = 0.97). Simultaneously, a very high value of CM = 0.95 described relations between property expenditure and the number of non-governmental organizations and business surrounding institutions registered in the commune.

The next analyzed instrument was investment expenditure on supporting new areas of production and modern technologies. The verification of the empirical material enables us to establish the existence of a very strong relation between using this instrument and the development of entrepreneurship. The effectiveness of the used support form was confirmed by high values of CM, which, as regards the influence of this instrument on the number of economic entities, oscillated around 0.95. A similar high value of CM characterized the ratios of taking up work (CM = 0.83) and mobility of production factors (CM = 0.95). The use of the above support forms translated into the ratio of people using trainings organized or financed from PUP funds aimed at professional activation of the unemployed (CM = 0.71), as well as the number of organizations and institutions in business surroundings operating in the analyzed JST (CM = 0.95). Investment expenditure was reflected in the growth of the number of companies and the development of non-governmental organizations and business surroundings institutions. The finally calculated CM indicated positive relation between the used support form and the growth of interest in PUP trainings aimed at professional activation of the unemployed.

Another instrument belonging to the expenditure category were communes' expenses on creating Centers of business support (Polish acronym - CWB). The application of the indicated instrument led to the increase of the number of people who took advantage of the loans offered by PUP to open a small business, and further the development of institutional background supporting entrepreneurial initiatives. The calculated CM indicated a very strong correlation between the level of investment expenditure on creating a system of tax preferences and the development of entrepreneurship on the area of the analyzed JST. The use of the above forms of support translated mostly into increased employment (CM = 0.96), and further into increased number of economic entities, mobility of production factors and the development of organizations supporting entrepreneurship (CM = 0.95).

With reference to the characterized instrument, we should point out that the activities initiated by communes to stabilize solutions concerning tax reliefs and exemptions play a vital role. The evaluation of the significance level indicated that the use of activities aimed at stabilizing solutions in tax policy affected the growth of the number of economic entities registered in the commune.

Another category of legal and organizational forms of supporting entrepreneurship were lower maximum rates in local taxes, classified as income instruments. Among the analyzed local taxes, only property tax and transport means tax showed influence on the development of entrepreneurship. The value of calculated CM enabled us to establish that there was a very weak relation between lowering the max-

imum rate of tax and dependent variables describing the development of entrepreneurship. This very weak influence was confirmed by low values of CM for both property tax (CM = - 0.47) and transport means tax (CM = - 0.22). The collected data allowed us to establish that the power of influence exerted by lower rates of single local taxes on the development of entrepreneurship was definitely lower than in case of creating complex systems of tax preferences, comprising, beside lower rates, also exemptions, deferment of payments and redemption of tax dues.

Podkarpackie province communes most frequently pointed at the use of tax instruments, including lower maximum rates of local taxes. Further places in the ranking were occupied by cooperation with local economic entities and creating strategies taking into account support of entrepreneurial initiatives. Communes were much less involved in training and consulting activities or undertakings improving the attractiveness of local communities for investors. The instruments of creating local guaranty and loan funds enjoyed very low popularity.

The scope of using promotional instrument by Podkarpackie province communes. The calculated values of CM indicated the existence of a strong correlation between the communes' expenditure on promotion and the dependent variables describing the development of entrepreneurship. From the perspective of the location of economic activity, apart from infrastructural conditions, construction of tax solutions and the attitude of commune authorities to external capital, the issues of esthetic environment and public safety and order in the commune are also important. Most of the surveyed JST (over 93%) evaluated the state of natural environment and environment esthetics positively, 21.3% — very positively. Simultaneously, the analysis showed that 70.2% of the units evaluated public safety and order positively, while only slightly over 23% of indications were very positive. The presented data is mostly the effect of the activities of local authorities in investment expenditure on environment protection. The estimated value of CM showed a strong relation between the use of the above instrument and the value of dependent variables describing the development of entrepreneurship. The highest value of CM characterized respectively the number of people employed in the area of the commune and the ratio of mobility of production factors. In both cases the value of CM equaled 0.89 and was on the border between strong and very strong relation between using this form of support and the development of entrepreneurship. A slightly lower value of CM characterized the parameter describing the number of economic entities registered in the commune (CM = 0.88), as well as the ratio of taking up work (CM = 0.87). Strong influence of independent variable was also shown in case of the number of non-governmental organizations and business environment institutions registered in the area of the commune and the dependent variable reflecting the number of people participating in trainings organized or financed by PUP, aimed at professional activation of the unemployed. The value of calculated CM was respectively 0.82 and 0.80.

Another form of support used by communes, classified as a promotional instrument, was the establishment of separate units within the office, dealing with promotion of the commune and local products. The analysis of empirical data confirmed very strong relation between using this instrument and the number of people employed in the area of the commune (CM = 0.96). The comparable value of CM described other dependent variables, namely the mobility of production factors,

number of non-governmental organizations and business environment institutions and the number of economic entities registered in the area of the surveyed communes. With the reference to each of the above mentioned variables, the value of CM was 0.95, which proved the existence of a very strong relation between the use of the above instruments and the value of the parameters indicating the development of entrepreneurial initiatives. Some of the surveyed communes confirmed that they used (as an additional instrument of supporting entrepreneurship) special programs promoting commune and local products. Among key components of these types of programs, communes mentioned supporting local companies in entering new markets, facilitating location of centers for business support in the commune as well as help in making contacts with entrepreneurs in the region.

The systematic presentation of postulated solutions in the area of entrepreneurship support. The classification of the proposed solutions aiming at creating conditions for effective support of entrepreneurship concentrates on 5 areas:

1) state legislature;

2) improving effectiveness of using available support instruments by local authorities;

3) possibility of creating and developing business environment institutions in local environment;

4) building awareness of availability of public aid for entrepreneurs;

5) risk related to realization of PPP projects.

This division is finished with the modeling of the influence of quantitative factors on the effectiveness of the activities taken up by Podkarpackie province commune authorities to support the development of entrepreneurship. In order to explain the influence of particular instruments of supporting economic initiatives on the development of entrepreneurship in Podkarpackie province, we conducted estimation, verification and analysis of the following linear econometric model:

Formula 2. **Initial linear econometric model**

$$Y=\alpha_0+\alpha_1 \cdot X_2+.....+\alpha_k \cdot X_k+\varepsilon,$$

Where:

Y — dependent variable,

$X_1, X_2,....., X_k$ are independent variables by means of which we want to explain the analyzed variable Y,

ε — random element which synthetically reflects all the random factors influencing the analyzed variable.

Source: own elaboration.

As the dependent variable we took the number of economic entities according to REGON (National Business Registry). The candidates for independent variables were the instruments of supporting entrepreneurship, with the reference to which we confirmed the dependence indicating a relation between using them and the results of these actions on the development of entrepreneurship side. From the catalogue of the instruments meeting the above requirement, 11 independent variables were selected. Then we conducted an estimation of the linear model parameters. We obtained the model consisting of 3 independent variables, that is: variable amount of

property expenditure of communes (in thous. PLN), variable using lower than maximum rates of property tax by communes (% lowering of the rate) and variable expenditure on promotional aims incurred by the commune (in thous. PLN). The model took the following form:

Formula 3. **Linear econometric model explaining the influence of support instruments on entrepreneurship development**

$$\hat{Y} = \underset{(80,16)}{81,13} + \underset{(0,01)}{0,22}X_2 - \underset{(2,11)}{5,92}X_4 + \underset{(0,70)}{10,98}X_{10}$$

Source: Own elaboration.

Next, we conducted the verification of the model. It boiled down to examining 3 properties, that is the degree of compliance of the model with empirical data, the quality of structural parameters and the selected properties of remainder distribution. The analysis of adjustment of the model to empirical data has shown that it explains 99.2% of variations in the number of economic entities. On the basis of the model, relying on the interpretation of a_i coefficients, we evaluated the quantitative influence of particular explanatory variables on the total number of companies. We distinguished the following regularities:

a) increased property expenditure of a commune by 1000 PLN causes the growth of economic entities by 0.22 (at unchanged values of other explanatory variables);

b) lowering the property tax rate by 1% will cause the increase of 5.92 in the number of economic entities (at unchanged values of other explanatory variables);

c) increasing commune expenditure on promotion by 1000 PLN will cause the growth of economic entities by 10.98 (at unchanged values of other explanatory variables).

We also evaluated the relative significance of the examined variables in the econometric model. The measure of relative significance of explanatory variable X_i in explaining changes of the explained variable Y is the coefficient of significance b_i defined in the following way:

Formula 4. **Coefficient of significance**

$$b_i = a_i \frac{\overline{x}_i}{\overline{y}} \qquad i=1,2,\ldots, k$$

Source: Own elaboration.

The calculated arithmetic means of particular variables equaled:

$$\overline{y}=1091,311,\ \overline{x}_2=3946,43,\ \overline{x}_4=27,951,\ \overline{x}_{10}=26,779.$$

On the other hand, the modules of significance coefficients of other explanatory variables had the following values:

$$b_2=0,796,\ b_4=0,150,\ b_{10}=0,269.$$

The values of particular coefficients indicate that the amount of property expenditure of a commune has the greatest significance in describing the total number of economic entities. The weights of two other independent variables (corresponding to instruments of supporting entrepreneurship used by communes) in the analyzed model are clearly lower, with expenditure on promotion exerting more influence on stimulating economic initiatives.

Bibliography:

Bartik, T. J. (1985). Business Location Decisions in the United States: Estimates of the Effects of Unionization, Taxes and Other Characteristics of States, Journal of Business and Economic Statistics, 3 (January): 14-22.

Bartik, T. J. (1988). The Effects of Environmental Regulation on Business Location in the United States, Growth and Change (Summer): 22-44.

Bauman, T. (1998). O mozliwosciach zastosowania metod jakosciowych w badaniach pedagogicznych, [in:] T. Pilch (editor), Zasady badan pedagogicznych, Wydawnictwo Akademickie "Zak", Warszawa.

Bondonio, D. (2003). Do Tax Incentives Affect Local Economic Growth? What Mean Impacts Miss in the Analysis of Enterprise Zone Policies, Center for Economic Studies, Working Papers 03-17.

Brown, S., Hayes, K. J., Taylor, L.L. (2002). State and local policy, factor markets and regional growth, Working Papers 02 02, Federal Reserve Bank of Dallas.

Buss, T. F. (2001). The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions: An Overview of the Literature. Economic Development Quarterly 15 (1): 90-105.

Carlino, G., Mills, E. S. (1985). Do Public Policies Affect County Growth?, Federal Reserve Bank of Philadelphia Business Review, July-August: 3-27.

Carlton, D. (1983). The Location and Employment Choices of New Firms: An Econometric Model with Discrete And Continuous Endogenous Variables, Review of Economics and Statistics, 65 (August): 440-449.

DePaulo, P. (2000). Sample size for qualitative research. The risk of missing something important, Quirk's Marketing Research Review, December.

Grodzka, D. (2008). Instrumenty wspierania dzialalnosci przedsiebiorstw przez jednostki samorzadu terytorialnego, [in:] G. Golebiowski (editor), Wybrane problemy wspierania przedsiebiorstw w Polsce, Biuro Analiz Sejmowych, Warszawa.

Holmes, T. J. (1998). The Effect of State Policies on the Location of Manufacturing: Evidence from State Borders, Journal of Political Economy, University of Chicago Press, Vol. 106(4).

Mynarski, S. (2003). Analiza danych rynkowych i marketingowych z wykorzystaniem programu Statistica, Wydawnictwo Akademii Ekonomicznej w Krakowie, Krakow.

Papke, L. E. (1991). Interstate Business Tax Differentials and New Firm Location: Evidence From Panel Data, Journal of Public Economics 45(1): 47-68.

Sadowska, T. (2003). Rola samorzadow w stymulowaniu rozwoju przedsiebiorczosci lokalnej, Folia Universitatis Agriculture Stetinensis 232. Oeconomica 42. Akademia Rolnicza, Szczecin.

Slominska, B. (2007). Gmina w procesach stymulowania przedsiebiorczosci "Samorzad Terytorialny", No 3.

Szewczuk, A. (2003). Czy polski system wspiera rozwoj lokalny?"[in:] A. Pomorska (editor), Kierunki reformy polskiego systemu podatkowego, UMCS, Lublin.

Стаття надійшла до редакції 21.05.2012.