SPATIAL DISTRIBUTION OF COMPETITIVENESS SUPPORT IN THE SLOVAKIA IN RELATION TO GROWTH POLES AND SMALL AND MEDIUM ENTERPRISES

Lenka Smékalová, Šárka Hrabinová, Martin Habuda

Abstract: The paper discusses the spatial dispersion of competitiveness support to the Slovak entrepreneurs via Operational Programme Competitiveness and Economic Growth in programming period 2007 – 2013 with relation to allocation granted to growth pole municipalities and small and medium enterprises. The analysis of implemented projects in reference period 2007 – April 2013 shows marked support for small and medium enterprises in terms of total allocation of European Union support. Spatially the programme is consistent with the intent to direct the European Union support to the growth poles rather than other municipalities with notable differences in thematic focus of the projects in innovation and cohesion growth poles despite no explicit preference of growth poles in programme manual or calls for proposals.

Keywords: Competitiveness, European Union, Growth poles, Slovakia, Small and medium enterprises.

JEL Classification: H25, R58.

Introduction

The issue of spatial distribution of the structural funds allocation is as of yet a topic that is widely observed mostly on the level of NUTS II respectively NUTS III regions. This closely corresponds with the viewpoint of the European Union as a whole which delimitates the Convergence regions at NUTS II level in order to provide financial resources to support sometime doubted convergence of the EU regions [12]. [13] states that the lack of focus on lower administrative levels is rather curious taking into consideration the importance of the external financial resources such as structural funds aid that are dedicated to limiting the regional disparities. With this notice in mind this paper deals with the spatial allocation of the Operational Programme Competitiveness and Economic Growth at the level of LAU 2 - Slovak municipalities.

As previously mentioned the European Union considers the eligibility for financial aid within the means of structural funds according to the GDP per capital in PPS at the NUTS II level. Considering the size of several Member States and the subsidiarity principle it is quite understandable that a Member State would developed a more detailed demarcation of intervention regions within its boundaries. The demarcation of the intervention regions varies widely even in geographically near Member States with relatively similar history economically speaking. Poland for example does not have a clear strategy of defining intervention regions at lower administrative level which has already been criticized and so the intervention regions are more or less identical with European Union demarcation of the economically weak Convergence regions. The Czech Republic as a Member State that is rather close to the Slovakia geographically and share substantial part of history including the previous policies of their shared state that were aimed to greatly reduce regional disparities with little thought to wider economic and social consequences [1]. The Czech

Republic has a national demarcation of so called regions with focused state aid delimitated at the LAU 1 and LAU 2 levels although [8] find no significant proof they are indeed preferred in terms of receiving European Union support. These intervention regions as in Poland represent economically weak areas of the Member State and significantly differ from Slovakia.

The approach of Slovakia as described in National Strategic Reference Framework is quite different from the above mentioned. Slovak government has delimitated intervention regions at the national level in the form of growth poles. The approach stems from the growth poles theory as presented by Francois Perroux although he personally intended it not for geographic but rather for economic space [14]. Growth pole theory within the frame of regional policy intervention suggests that limiting the investments into several chosen locations will result in increased economic activity in surrounding region [19].

The demarcation of Slovak growth poles which are officially approved to gain most from the structural funds allocation was made with very strong relation to the Slovak settlement system. The growth pole cities had to fulfil condition of being the seat of selected higher administrative structures, the growth pole municipalities were determined according to the number of inhabitants, seats of lower administrative structures and educational facilities [11]. Curiously enough no significance was given to the economic or wider sociologic characteristics relaying mostly on settlement structure as described in 2001 Concept of Spatial Development of Slovakia. The European Commission has already expressed the concept of growth poles should be more efficient in 2014-2020 programming period [5].

Nevertheless Slovak concept declares higher priority of supporting the growth poles that are divided into cohesion and innovation growth poles [20].

This intention is set at the national level of Strategic reference framework and pertains to all structural funds financed operational programmes in the Slovak Republic. The Operational Programme Competitiveness and Economic Growth was chosen due to its nature as the operational program most focused on support of the entrepreneur. The in depth analysis will allow achieve more than verification of objective with regards to spatial distribution of structural funds allocation. The secondary objective is to verify declared support of the small and medium enterprises (SMEs).

As the SMEs account for more than 98 % of European Union enterprises and according to estimate employ 67 % of European labour force [3] and are widely regarded as indispensable for economic growth they also face some difficulties especially with regard to accessing financial resources to support various endeavours in research and development [17], [22], human resources or promotion area [21], [25]. The studies of government or Union support oriented at SMEs have been undertaken in many countries, e.g. Polish study by [10], United Kingdom study by [27], Italian studies by [18], [28] or the regional level study from the Czech Republic by [26]. The legal concept of state aid to SMEs was discussed by [9]. The studies show various results and the recommendations mostly focus on reduced bureaucracy and simplifying of necessary procedures which is already reflected by the European Commission [2], [4].

1 Statement of a problem

The European Union support of enterprise competitiveness in the Slovakia is implemented mainly through the cohesion policy instruments, namely the Operational

Programme Competitiveness and Economic Growth which is the object of research described in this paper.

The main aim of this paper is to verify whether the declared intention of supporting SMEs and targeting the growth pole municipalities was so far achieved in the programming period 2007-2013 within the Operational Programme Competitiveness and Economic Growth while attempting to differences between the nature of projects located in innovation and cohesion growth poles. Secondary intention is to evaluate the support given to the SMEs as opposite to large companies with reference to proclaimed support of the SMEs at the Union level and Slovak national level as declared in the programming document of The Operational Programme Competitiveness and Economic Growth which aims at improving the SME's access to finance, single market of the European Union, the very establishment of SMEs, their technology capacity, or human resources and networking [15].

2 Methods

The Central coordination Body of the Slovakia regularly publishes the list of beneficiaries of all operational programmes coordinated by the bodies in the republic. The list as of 30th April 2013 provided the very basis of the researched projects' matrix. The list includes information about beneficiary (name and identification number), project (part of title, date of start and ending of the project, unique code of project) and the budget (planned Union contribution, national budget resources and private contribution).

The information, however, was insufficient for the purpose of the analysis therefore it had to be completed by further information about the beneficiary gained from the Statistical registry of organizations maintained by the Statistic Office of the Slovak Republic. The registry supplied information about SK-NACE category, number of employees, institutional sector and seat of the beneficiary.

As for the projects the unique code, an ITMS code, enabled when decomposed to identify the specific priority axis and measure within whose frame the project was implemented. Still the information related to project were insufficient especially because it lacked the actual location of the project implementation. This information was obtained from Central Register of Contracts maintained by the Government Office of the Slovak Republic. The Central Register of Contracts contains information about public contracts concluded from 2011 onwards including later amendments. The layout of the contract concerning the provision of a non-repayable financial contribution is unified and includes the information about the place of implementation of the projects which provided necessary data on location. The contracts that were concluded before 1st January 2011 were often amended. These later amendments included the same information about location. As for any other projects the information about location was derived from the same type of contract published on Central Register of Projects maintained also by the Government Office of the Slovak Republic.

The enlarged matrix of projects and their attributes was then completed by adding reclassified data pertaining to growth poles and number of inhabitants of impacted municipalities. The matrix was comprised of 1021 projects and 74 more technical assistance projects which were excluded from further evaluation as they represent amount of allocation dedicated to daily programme maintenance.

Tab. 1: Attributes of researched projects

Attribute	Possible values		
NACE category	SK-NACE divisions 01-99		
Number of employees	Microenterprise		
reclassification	Small enterprise		
	Medium enterprise		
	Large enterprise		
Institutional sector of beneficiary	Local or central government		
	Private sector		
Seat of beneficiary/ Site of implementation	Municipality – District – Self-Governing Region		
Priority axis	Innovations and Growth of Competitiveness		
	Energy Sector		
	Tourism		
	Technical Assistance		
Measure	1.1 Innovation and technology transfers		
	1.2 Support of common services for entrepreneurs		
	1.3 Support of innovation activities in enterprises		
	2.1 Increasing energy efficiency both on the side of generation and consumption and introducing advanced technologies in the energy sector		
	2.2 Establishment and modernisation of public lightening for towns and municipalities and consultancy providing in the field of energy sector		
	3.1 Support of business activities in tourism		
	3.2 Development of information tourism services, presentation of regions and of Slovakia		
	4.1 Technical Assistance		
Implementation area	Municipality – District – Region		
Growth pole	Innovation growth pole		
identification of impacted municipality	Cohesion growth pole		
	Not a growth pole		
Number of inhabitants of impacted municipality	Average number of inhabitants in years 2007 - 2012		

Source: Authors

3 Problem solving and discussion

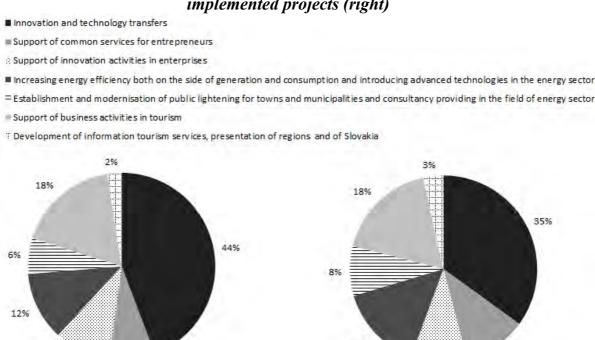
The Operational Programme Competitiveness and Economic Growth states its aim is to ensure the sustainable economic growth and employment through priority axes and measures introduced in table 1. As of April 2013 there have been 32 calls for proposals issued by the managing and intermediate bodies. These covered all priority axes with the exception of Technical Assistance which is not the subject of this research. All the calls for proposals were spatially oriented at the Convergence regions of Slovakia that is all the regions with the exception of the Bratislava Self-Governing Region where the capital of the country is located. This limitation was most often used for the location of project implementation although in projects oriented at supporting the companies in attending various fairs, meeting and exhibitions the location of company seat was also restricted to Convergence regions only. The support of the SMEs is quite pronounced as half of the proposals have been restricted to the SMEs only and one more preferred the SMEs in selection criteria giving additional point for being micro, small or medium enterprise. Given than 4 more calls for proposals were directed at regions and municipalities only, there were only 11 calls for proposals that did not specifically take into account whether the beneficiary is a SME or not.

The preference for SMEs is quite pronounced while the preference for cohesion and growth poles is not specifically mentioned in the calls for proposals documentation and neither it is overly emphasized in programme manual. With the exception of measure 3.2 Development of information tourism services, presentation of regions and of Slovakia all the measures are to be implemented in all types of municipalities within the area of Convergence regions.

The total allocation of the evaluated projects that have been implemented from 2007 to April 2013 amounted to 644,5 mil. \in from the European Union resources, 106,4 mil. \in from the Slovak national budget and 600,5 mil. \in of co-funding resources procured by the beneficiaries. The ratio of Union to other resources was visibly favourable in the local and central government institutions projects in comparison to the beneficiaries from the private sector. Every Euro of the private sector contribution was complemented by 0,83 \in from Union resources and 0,14 \in from Slovak government resources.

The distribution of the intended total Union resources allocation of 968,3 mil. \in among the measures is indicated in fig. 1 on the left side, the right side depicts the dispersion of those resources as it was in the evaluated projects (644,5 mil. \in). The greatest disproportion can be seen in Measure 1.1. Innovation and technology transfers which is the largest intended one and so far disproportionately small, other measures are so far implemented proportionally to the intended allocations.

Fig. 1: Distribution of resources among the measures as planned (left) and in implemented projects (right)



Source: Authors' calculations, [16]

11%

A closer look at the beneficiaries of The Operational Programme Competitiveness and Economic Growth reveals that the programme is predominantly focused on private sector subjects rather than public sector at least in terms of total amount of financial aid they gained so far − 491,3 mil. € of allocation to private sector to 153,2 mil. € to public, though in terms of sheer number of the projects (693 project approved in private sector to 328 in public sector) the disproportion is not as large. While looked at by the pure mathematical average the public sector beneficiaries' projects are generally smaller these institutions implement several nationwide projects of substantial allocation oriented mainly at accessibility of finance for SMEs and locally oriented projects preparing the business infrastructure. These projects and their outputs will be further used to the benefit of private entrepreneurs. Only the measure 2.2 Establishment and modernisation of public lightening for towns and municipalities and consultancy providing in the field of energy sector is significantly focused on public sector with smaller immediate benefits to the entrepreneurs.

10%

The proclaimed support the SMEs is greatly evinced in the decomposition of the European Union resources allocation among the size categories of beneficiaries from the private sector (see table 2). The SMEs account for approximately 94 % of all private sector implemented project and 91 % of Union resources allocation. The resources complementing private investments differ only slightly among the size categories, however, the largest perceivable difference lies with the large companies that receive slightly lesser amount of Union support per invested €.

Tab. 2: Characteristics of projects implemented by the private sector subjects

Company size	Number of projects	Share of total EU resources allocation	Average EU resources per 1 € of private co- funding
Microenterprise	280	43,5 %	0,75 €
Small enterprise	204	25,4 %	0,70 €
Medium enterprise	166	21,9 %	0,76 €
Large enterprise	28	6,0 %	0,65 €
Unknown size	13	3,2 %	0,77 €

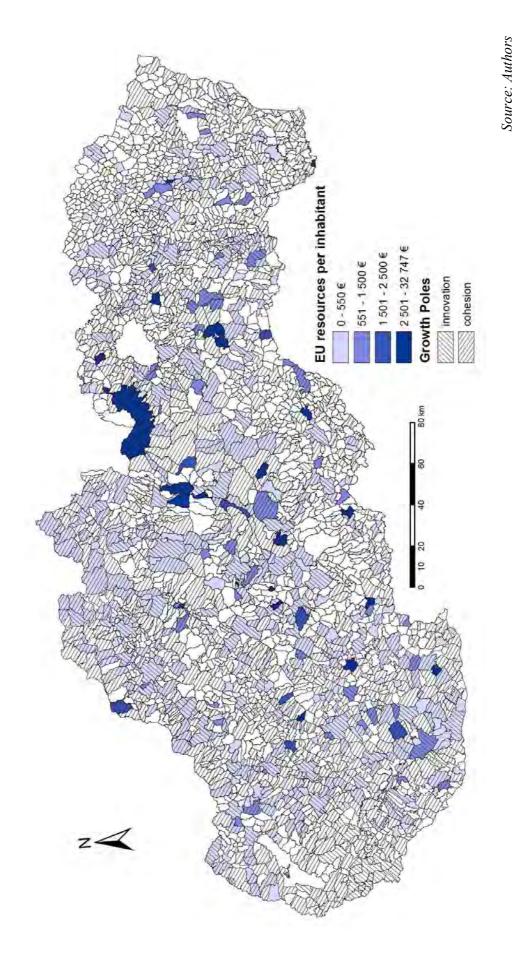
Source: Authors' calculations based on [6], [7]

As for the SK-NACE identification of the beneficiaries the most prominent one is the Public administration and defence; compulsory social security (84) with 21 % of European Union allocation which associates all the public sector bodies and institutions. The private sector does not have such an outstanding category. The allocation is distributed through greater number of SK-NACE divisions however there are some more remarkable ones such as Wholesale trade, except of motor vehicles and motorcycles (46) with 9,3 %, Activities of head offices; management consultancy activities (70) with 7,9 % or Electricity, gas, steam and air conditioning supply (35) with 5,5 %. From a broader point of view 39 % of the allocation is aimed at the secondary sector and 61 % on the tertiary sector.

The overall spatial distribution of the Union resources per one inhabitant at the level of Slovakian municipalities is depicted in fig. 2 according to the location of implementation of the projects. The picture clearly shows that municipalities that are either cohesion or innovation growth pole are quite numerous. Also they represent the main territory of project implementation belongs indeed among the municipalities designated as growth poles. Only 13,5 % of Union resources are directed into non-growth pole municipalities whereas the remaining allocation is directed into the growth poles with distinct preference for innovation growth poles (46,7 % of Union resources sum). The absolutely largest amount of European subsidy per inhabitant are recorded in small municipalities (100 – 200 inhabitants) in Central Slovakia and are connected to the development of tourism infrastructure most prominently in mountain resorts of the Tatra Mountains. Other than that highest per inhabitant allocation can be found in relatively small municipalities that are seats to companies implementing projects concerning energetic efficiency.

While the allocations directed to large cities are in total larger than in smaller municipalities and so is the number of projects which do tend to concentrate in larger municipalities the per inhabitant calculation visibly favours smaller settlements that are either attractive from the point of view of tourism or are the location of a strong successful beneficiary.

Fig. 2: Allocation of European Union resources per inhabitant in municipalities of Slovakia



The matter of difference between three types of municipalities – cohesion growth poles, innovation growth poles and non-growth poles is described in table 3 from the point of view of project types. It confirms the assumption that the general support for entrepreneurs is most pronounced in the innovation growth poles which are in fact the largest municipalities and as such are understandably also centres of economic activities. The support for municipalities concentrated in public lighting projects follows the opposite trend as the non-growth pole municipalities are more often smaller and have not yet implemented public street lighting and energy efficiency measures. The support for tourism entrepreneurs also reflects rather peripheral position of cohesion growth poles and non-growth poles as areas more suitable for development of tourism activities.

Tab. 3: Distribution of European Union resources among project types and municipality

types

Municipality type	Innovations, technology and services for entrepreneurs	Energetic efficiency in manufacturing	Public street lighting and public energy efficiency	Support of entrepreneurs in tourism
Innovation growth pole	68%	18%	2%	13%
Cohesion growth pole	47%	13%	12%	27%
Not a growth pole	21%	28%	26%	25%

Source: Authors' calculations based on [6], [7]

Conclusion

The implementation of The Operational Programme Competitiveness and Economic Growth complies with the overall intent declared in the National Strategic Reference Framework of the Slovak Republic for current programming period in terms of spatial distribution of the European allocation. While neither the operational program nor the program manual documents explicitly state the allocation is to be directed solely to the growth poles delimitated by the Slovak government, the majority of Union allocation indeed targets these municipalities while the implementation outside the growth poles is rather infrequent in its occurrence.

The projection of the analysis results into map shows several peaks in municipality support which can be most often connected to building tourism infrastructure in mountainous region of central Slovakia. The question of character of supported projects in cohesion growth poles, innovation growth poles and non-growth pole municipalities posed at the beginning of the paper is sufficiently covered by the analysis of thematic focus of the projects and confirm there are indeed differences not only in amount of support but rather in the nature of implemented projects. In consistence with the character of delimitation of the growth poles the innovation poles show marked preference for private sector implemented project with focus on direct entrepreneurship support, the cohesion growth poles exhibit propensity to stronger support of tourism entrepreneurship as do the non-growth pole municipalities which are overall characteristic by the most prominent involvement of public sector beneficiaries.

Generally the results of the analysis show success in both declared intentions – to support SMEs and spatially direct the resources to the growth poles consistently with the long-term development strategy of Slovak government.

Acknowledgement

This contribution was supported by IGA/FaME/2013/007, "Implementace kohezní politiky v České, Polské a Slovenské republice".

References

- [1] BALÁŽ, V. Regional Polarization under Transition: The Case of Slovakia. European Planning Studies, 2007, 15(5), 587-602. ISSN 0965-4313.
- [2] CALOGIROU, C., et al. *Business Dynamics: Start-ups, Business Transfers and Bankruptcy*. European Commission, DG Enterprise and Industry. [cit. 2013-07-25]. Available from WWW: http://ec.europa.eu/enterprise/policies/sme/business-environment/files/business dynamics final report en.pdf.>
- [3] ECORYS. EU SMEs in 2012: at the crossroads: Annual report on small and medium -sized enterprises in the EU, 2011/12. [cit. 2013-07-25]. Available from WWW: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2012/annual-report en.pdf.>
- [4] EUROPEAN COMMISSION. *Minimizing regulatory burden for SMEs. Adapting EU regulation to the needs of micro-enterprises*. [cit. 2013-07-19]. Available from WWW: http://ec.europa.eu/governance/better_regulation/documents/minimizing_burden_sme e EN.pdf.>
- [5] EUROPEAN COMMISSION. Position of the Commission Services on the development of the Partnership Agreement and programmes in SLOVAKIA for the period 2014-2020. [cit. 2013-07-22]. Available from WWW: http://www.nsrr.sk/ download.php?FNAME=1355232868.upl&ANAME=Pozi%C4%8Dn%C3%BD+doku ment+AJ+verzia.pdf.>
- [6] GOVERNMENT OFFICE OF THE SLOVAK REPUBLIC. *Centrálný register projektov*. [cit. 2013-06-17]. Available from WWW: http://crp.gov.sk.
- [7] GOVERNMENT OFFICE OF THE SLOVAK REPUBLIC. *Centrálný register zmluv*. [cit. 2013-06-17]. Available from WWW: http://crz.gov.sk.>
- [8] HÁJEK, O., et al. Regionální disparity a financování regionální politiky některé poznatky z České republiky. Politická ekonomie, 2012, 60(3), 330-349. ISSN 0032-3233.
- [9] JANKŮ, M. Small And Medium-Sized Enterprises In The EU And State Aids Provided For Their Support. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2012, 60(2), 103-108. ISNN 1211-8516.
- [10] KLONOWSKI, D. The Effectiveness of Government-Sponsored Programmes in Supporting the SME Sector in Poland. Post-Communist Economies, 2012, 22(2), 229-245. ISSN 1463-1377.
- [11] KOŠICKÝ SAMOSPRÁVNÝ KRAJ. Program hospodárskeho a sociálneho rozvoja Košického samosprávneho kraja v programovacom období 2007 2013. [cit. 2013-07-25]. Available from WWW: http://www.vucke.sk/APIR/sk/Pre

- _Podnikatelov/phsr/Stranky/default.aspx.
- [12] KOŤÁTKOVÁ STRÁNSKÁ, P., LELEK, T. Analysis of European Union Cohesion. Scientific Papers of the University of Pardubice, Series D, 2012, 24(2), 102-113. ISSN 1804-8048.
- [13] KRAMÁREKOVÁ, H. Priestorové aspekty čerpania štrukturálnych fondov v Nitrianskom samosprávnom kraji v rokoch 2004-2006. Geographic Journal, 2010, 62(4), 347-373. ISSN 0016-7193.
- [14] MCKEE, D. L. Services, Growth Poles and Advanced Economies. Service Business, 2008, 2(2), 99-107. ISSN 1862-8516.
- [15] MINISTRY OF ECONOMY OF THE SLOVAK REPUBLIC. *Operational Programme Competitiveness and Economic Growth*. [cit. 2013-07-21]. Available from WWW: http://www.nsrr.sk/download.php?FNAME=1224566326.upl&ANAME=OP+CaEG 121107.zip.
- [16] MINISTRY OF ECONOMY OF THE SLOVAK REPUBLIC. Programový manuál k *Operačnému programu Konkurencieschopnosť a hospodársky rast, verzia 3.13*. [cit. 2013-07-25]. Available from WWW: http://www.economy.gov.sk/ext_dok-programovy-manual-k-op-kahr_3-13/140380c?ext=orig.
- [17] MÜLLER, E., ZIMMERMANN, V. The importance of equity finance for R&D activity. Small Business Economics, 2009, 33(3), 303-318. ISSN 0921-898X.
- [18] NOVERO, S. Impact analysis of public policies supporting SMEs' technological innovation: An Italian case. International Journal of Technology, Policy and Management, 2011, 11(1), 34-56. ISSN 1468-4322.
- [19] PARR, J. B. Growth-pole Strategies in Regional Economic Planning: A Retrospective View. Part 1. Origins and Advocacy. Urban Studies, 1999, 36(7), 1195-1215. ISSN 0042-0980.
- [20] POLÁČKOVÁ, L., POTOMOVÁ, J. Problematika vymedzovania marginálnych regiónov v plánovacích dokumentoch SR. Geographia Cassoviensis, 2010, 4(1), 135-139. ISSN 1337-6748.
- [21] ROMAN, A. SMEs' Sector Access to Finance: An Overview. Annals of Faculty of Economics, 2011, 22(1), 431-437. ISSN 1222-569X.
- [22] SCELLATO, G., UGHETTO, E. The Basel II reform and the provision of finance for R & D activities in SMEs: An analysis of a sample of Italian companies. International Small Business Journal, 28(1), 65-89. ISSN 0266-2426.
- [23] STATISTICAL OFFICE OF THE SLOVAK REPUBLIC. *Štatistický register organizácií*. [cit. 2013-06-17]. Available from WWW: http://www.statistics.sk/pls/wregis/dotaz.>
- [24] STATISTICAL OFFICE OF THE SLOVAK REPUBLIC. *Demografia*. [cit. 2013-06-18]. Available from WWW: http://portal.statistics.sk/showdoc.do ?docid=2434.>
- [25] TÖDTLING, F., KAUFMANN, A. The Role of the Region for Innovation Activities of SMEs. European Urban and Regional Studies, 2001, 8(3), 203-215. ISSN 1461-7145.

- [26] VÁCHAL, J., PÁRTLOVÁ, P., STRAKOVÁ, J. Podpora malého a středního podnikání s využitím prostředků EU v podmínkách Jihočeského kraje. Littera Scripta, 2010, 3(1-2), 112-122. ISSN 1805-9112.
- [27] WILLIAMS, D., FASIANOS, A. State Aid 2000-2010: The UK Experience. Local Economy, 2011, 26(6-7), 532-543. ISSN 1470-9325.
- [28] ZECCHINI, S., VENTURA, M. The impact of public guarantees on credit to SMEs. Small Business Economics, 2009, 32(2), 191-206. ISSN 1573-0913.

Contact Address

Ing. Lenka Smékalová

Tomas Bata University in Zlín, Faculty of Management and Economics Department of Regional Development, Public Sector Administration and Law Mostní 5139, 760 01 Zlín, Czech Republic

Email: smekalova@fame.utb.cz Phone number: +420 576 032 807

Ing. Šárka Hrabinová

Tomas Bata University in Zlín, Faculty of Management and Economics Department of Regional Development, Public Sector Administration and Law Mostní 5139, 760 01 Zlín, Czech Republic

Email: hrabinova.pracovni@centrum.cz

Phone number: +420 576 032 842

Ing. et Ing. Martin Habuda

Tomas Bata University in Zlín, Faculty of Management and Economics Department of management and Marketing Mostní 5139, 760 01 Zlín, Czech Republic Email: Martin.habuda@seznam.cz

Received: 29. 08. 2013

Reviewed: 12. 02. 2014, 26. 02. 2014 Approved for publication: 31. 03. 2014