ECONOMIC ASPECTS OF SOCIAL SERVICES DEVELOPMENT IN SLOVAKIA IN THE CONTEXT OF DEMOGRAPHIC CHANGES

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Abstract: At present, the global aging process of inhabitants represents a serious social challenge that is related to those countries whose size or economic power is not that significant aspect. Rapid increase of older population results in an increasing inquiry of long-term health care services (long-term care – LTC). As a result of a progress in research as well as investments in health care services, health care constantly improves, but there are increasing inequalities in health of vulnerable groups of inhabitants, such as elderly. The given article focuses on the above mentioned facts and its primary aim is to emphasize the importance of multi-dimensional analyses of available social services in the process of population global aging. In the presented partial results, the research focused on the analysis of social services providers in Slovakia from the point of view of their form, structure, capacity and regional differences. The secondary aim of the article is concentrated on an urgent need to resolve the issue of the Slovak population aging by means of chosen demographic indicators, as well as it focuses on a significance of legal framework formation that would provide long-term health care in Slovakia via social and health care services development.

Keywords: Ageing Population, Social System, Health System, Social Service Providers, Long-term care.

JEL Classification: 110, 115, 118.

Introduction

Development of social services in Slovakia follows the National Priorities of Social Services Development for 2015 – 2020 (hereinafter the National Priorities) that also represents a tool of state policy for provisioning the social services system in the country. The National Priorities are drawn up in accordance with an activity of the Ministry of Labour, Social Affairs and Family of the Slovak Republic as well as the Strategy for Deinstitutionalization of Social Services System and Foster Care in the Slovak Republic [14]. They are based on the identified needs in the national and European context with an emphasis on availability and accessibility of social services and their long-term financial sustainability and efficiency (National Priorities). Similarly, the social services represent a significant part of primary aims of the Europe 2020 strategy. The main mission of the social services in Slovakia is a support of integrating people into society, social cohesion, routing to the services that are provided on the community level and developing of their potential in the field of employment and employability. The dependence of people on public and especially social services is created as a result of their unfavorable social situation. The citizens have their right to live free and independent life with a support of society on the basis of non-discriminatory principle. Many international documents have built their primary platform on respecting human rights and fundamental freedoms.

The National Priorities of Social Services Development in Slovakia reacts to current challenges of social help for citizens, where especially belongs a development of various care services at community level, including the needs of social services modernization. In Slovakia, there is a long-term lack of social services capacities that are provided in natural (home and community) environment of citizens, as well as insecure sustainability of the social services financing and their quality.

The National Priorities for 2015 – 2020 aims at:

- providing of social services availability in accordance with community needs,
- supporting of social services recipients' conversion from institutional care to community care,
- supporting development of social services available for people who remain in a spatially segregated location where a concentrated poverty and generational reproduction of poverty are present,
- increasing the quality of provided social services.

These aims (that are focused on availability, structure and quality of social services) may be accomplished when the present status of social services necessity, their development, determinants, as well as legal and other barriers are known.

1 Statement of a problem

Aging process of inhabitants of a particular country represents a significant determinant that influences needs and structure of social services [4]. The concepts and strategies of social development influenced by significant external influences and their penetration into different types of policies are getting more attention [13]. This issue that is constantly proclaimed at the international and also national level might be also well known as global aging [8]. The natural growth of population (the difference between a number of born alive infants and dead people) will stop in 2015 according to the Eurostat data. In 2011, the lowest population growth census in the history of population censuses was recorded when population, houses and apartments census was performed in Slovakia. Significant decrease of people in pre-productive age (0-14 years) from 18.9 % in 2001 to 15.3 % in 2011 was observed in comparison to data from 10 years ago [7] [11]. The perspectives of demographic development play a significant role in a formation of social services strategies [6]. They represent complex processes that require suitable methodological procedures and a sufficient amount of knowledge of the individual demographic processes [9]. The most frequent method is a (cohort) component method which is used by the Infostat perspectives in forecasting the medium-term development at a country level. It consists of the age groups shifting, either their increase, or decrease as a consequence of mortality, childbirth, migration and other demographic indicators [15]. The perspective till 2060 was formed in 2012 on the basis of the population, houses and apartments census from 2011. It has its basis in the number of citizens, age structure and composition of the population according to sex in a base year as well as in the rates of demographic indicators for the following period [5]. Both, length of forecasting period and transformation development of Slovakia that has been developing, influence the demographic perspectives. The slight increase of population number in Slovakia is expected till 2030 according to a medium scenario of population development and after 2030, a slight decrease is expected.

Table 1 shows a total number of inhabitants, main age groups and natural growth of population in a forecasting period.

Tab. 1: Forecasted number of inhabitants, main age groups and natural growth

of population in SR

Year	0			Total number of	Natural growth	Average age of	
	0 - 14	15 - 64	65 +	inhabitants		inhabitants	
2020	867,919	3,698,638	936,550	5,503,107	1,430	41.25	
2030	785,829	3,594,565	177,579	5,557,973	-12,250	43.98	
2040	700,565	3,456,245	1,375,214	5,532,024	-17,187	46.37	
2050	709,531	3,118,909	1,641,562	5,470,002	-21,406	47.91	
2060	678,530	2,899,363	1,767,037	5,344,930	-29,437	49.18	

Source: processed on the basis of data [5]

In Slovakia, the decrease in number of inhabitants may be expected since 2030 as the data in the Table 1 shows, as well as the number of inhabitants in pre-productive and post -productive age will decrease, however, the number of citizens over 65 years will increase. The post-productive item will form one third of population according to a perspective. The average age of citizens will also be constantly increasing.

Aging process is not a newly established phenomenon. Its intensity and structure may be analyzed in the retrospective horizon, where regional disparities need to be quantified.

2 Long-term health care in Slovakia – applying research to practice

It is very important to know as demographic aspects and their development in a country so the present structure of social services providers, including their capacity calculations, morbidity limitation, availability, etc. in searching for resources to achieve the National Priorities for 2015 – 2020 aims. This area has been neglected for a very long time in terms of social and health policy of the Slovak Republic, which may be proved by an absence of legislative improvement of a long-term health care. In 2014, the research that analyzed a structure of the Slovak social services providers in detail was realized on the basis of our contractual cooperation with the Association of Health Insurance Companies. In Slovakia, there is still an absence of complex analyses of capacities and needs of health and social services, as well as complex analyses of the Slovak population morbidity. As a consequence of this fact, it is very difficult to determine the present, as well as potential demand for social and health services. Those special-purpose analyses that had been realized so far focused on chosen aspects of social services, while their structure and availability was only interpreted and evaluated in the summary indicators.

2.1 Methodology and database

The database of all the "Social services providers" in Slovakia (hereinafter the SSP) was used as the basis of our analysis. Totally, it includes 3518 items and 20 variables till 01.06. 2014, and in this article were applied the following: form of social service, guarantor, type of social service, Region of provided social service and facility capacity. MS Excel 2010 was used to process data – pivot tables and pivot diagrams. This special type of statistical tables contains data which are classified according to two or more statistical signs. A combination of classified aspects enables to emphasize the mutual connections and the SSP structure.

2.2 Partial research results

This chapter provides partial outputs of the analyzed SSP structure in Slovakia according to targeted criteria. Figure 1 illustrates their effort to participate in social services provisioning in a give region. Each of these forms has its particularities as the Social Services Act proposes [1]. However, a certain relation in this process may originate from a very low rate of the SSP as legal persons established by a city, or municipality, which is connected to predetermined and used model of social system in a given district.

SR - the SSP number depending on provider 1400 1200 ■ Weekly residence Outpatient 1000 Annual residence 800 600 400 200 0 Private Municipality/city L.p. established by self-L.p. established by governing Region municipality/city

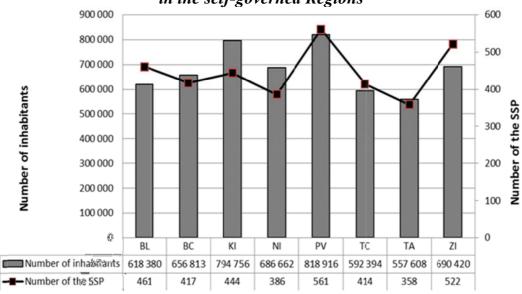
Fig. 1: The SSP structure in Slovakia according to a guarantor

Source: own elaboration

As shown in Figure 1, in the structure of SSP by forms of social services weekly and annual residence dominates and a significant proportion in weekly residence has the Municipality/city. Significant proportion in the annual residence is covered by Private provider. Private provider is also dominant in the Outpatient form of SSP. A large share of SSP providing challenging weekly form of social services is being set up by Municipal/city. This justifies the significant status of municipalities/cities in the role of the founder that provides of social services. In this process the financial aspect is problematic. Current funding of long-term care through social welfare and minimum funding through public health insurance is inadequate. In addition to the need for increased funding from the public health insurance sources it is necessary to legislatively adjust the new long-term financing options. When setting the parameters of social policy in the different regions the indicator of development of population in the region should be monitored and also the related aspects of migration, changes in demand for social services in different regions in context of morbidity of population groups, etc. These facts are currently monitored in Slovakia only partially and on an insufficient level. Similarly, the form of social services provisioning in a given region may imply a direction of social policy predetermination in a given region. Each of these forms has its particularities as the Social Services Act proposes [1]. Provisioning of field social service or outpatient social service prevail over residence social service. If a field or outpatient social service is not suitable or effective and its provisioning does not sufficiently solve the unfavorable social situation of a person, the residence social service is provided. Weekly residence social service prevails over annual one with regard to preferences. Citizen has his/her right to choose a form of service and this right must be respected without any regard to given rules of preferences. Social service may also be provided via telecommunication technologies in such case that are efficient for a specific situation or an issue. The number of the SSP

in the individual Regions of Slovakia is not uniform. Similarly, there are evident disparities in the regional distribution (Figure 2).

Fig. 2: Number of the SSP and number of inhabitants (till 31.12.2014) in the self-governed Regions



Source: own elaboration

Abbreviations to the table:

Region: BL: Bratislava, BC: Banská Bystrica, KI: Košice, NI: Nitra, PV: Prešov, TC: Trenčín, TA: Trnava, ZI: Žilina

Figure 2 illustrates the regional disparities in the number of providers of the individual Regions. This fact may not be evaluated without any knowledge of contextual conditions, regional social policy, its development strategy, demographic aspects, as well as health policy aspects (e.g. burden of some industrial areas by higher rate of morbidity and mortality of inhabitants, there is a tendency of higher need for health and social services in chronic diseases in case of older inhabitants, etc.). An interesting view and valuable information for social policy is provided by the SSP structure in the individual Slovak Regions (Table 2 and Figure 3). In most of the Regions, there prevail the providers established by municipality/ city, except of three Regions (Bratislava, Nitra and Prešov).

Tab. 2: Number of the SSP according to a provider in the individual Slovak Regions

SR – number of the SSP								
(%) Provider	BL	BC	KI	NI	PV	TC	TA	ZI
Private	51	37	43	38	50	33	31	26
Municipality/city	22	39	43	30	32	43	37	48
L.p. established by								
municipality/city	14	5	5	11	4	10	21	5
L.p. established by self-								
governing Region	12	20		20	14	14	11	21
Total:	100	100	100	100	100	100	100	100

Source: own elaboration

Figure 3 confirms the fact that a significant place in social services provisioning have non-governmental organizations [12]. Here also belong physical and legal persons of business or non-business character (e.g. associations, movements, groups, foundations, interest groups, employers, entrepreneurs, etc.). The social basis (even if it is possible to gain profit for service provisioning) lies on service accessibility to citizens who have

a lack of resources to purchase these services, or to ensure their reimbursement from other resources.

600 561 522 ■ L.p. established by 500 municipality/city 461 444 417 414 386 400 L.p. established by self-358 governing Region 300 ■ Municipality/city 200 ■ Private 100 0 PV ZI BL BC KI NI TC TA

Fig. 3: SR (Regions) – number of the SSP according to a provider

Source: own elaboration

In analyzing the forms of provided social services in the individual Regions, a dominance of three forms is obvious in these individual Regions: residence – annual, field and outpatient. Weekly residence social service is represented the least (Table 3).

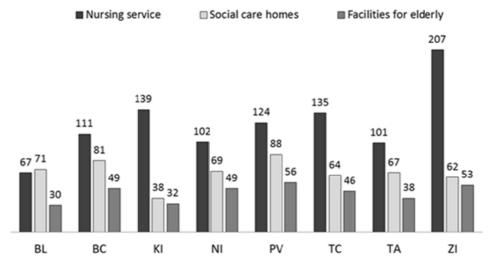
Figure 4 illustrates the number of the SSP that form a half of all the SSP in the individual Regions. It includes: Nursing service, Social care homes and Facilities for elderly. The Facilities for elderly are the most frequent in Žilina Region, except Bratislava Region.

Tab. 3: Forms of provided social services in the individual Slovak Regions

SR – number of the SSP (%)								
Form	BL	BC	KI	NI	PV	TC	TA	ZI
Residence - annual	32	41	28	43	32	33	33	29
Field	24	36	38	32	32	43	37	49
Outpatient	40	21	33	23	32	21	28	20
Residence - weekly	2	2	1	2	2	3	1	2
Other form	2	0	1	0	1	0	1	0
Total:	100	100	100	100	100	100	100	100

Source: own elaboration

Fig. 4: Number of the SSP in the individual Regions that form a half of all the SSP



Source: own elaboration

It is also necessary to analyze the SSP capacities in the individual Regions within the SSP analyses (Table 4). The largest capacity has those SSP which provide annual residence form of social service.

As the Table 4 shows, Facilities for elderly and Homes of social services have a dominant position in a given SSP structure from the point of given capacities in the SSP register. The main reason is a provision of a wider range of social services, such as in case of day care, or Nursing care facility. The given observation may be justified by a fact that Homes of social services, as well as Facilities for elderly are not strictly specialized in the chosen type of diagnosis, they are often adjusted to other various types of diagnoses that are particular for a given age category. This wider orientation of social services provisioning predetermines a higher demand for social and health care and simultaneously, for higher use of the SSP capacities, or the may signalize their potential insufficiency. Database of target group, i.e. number of socially dependent people who are differentiated with regard to individual diagnoses, or addictions to social service is necessary for an evaluation of their optimum.

Tab. 4: Capacity of the SSP facilities according to the social service form

SR – the SSP facilities'		•				
capacity*	Form	Total	Rate			
Type of social service	Residence - annual	Outpatient	Residence - weekly		(%)	
Home of social service	17,609	1,711	705	20,025	42.1	
Facility for elderly	14,372	132	1	14,505	30.5	
Specialized facility	3,570	191	46	3,807	8.0	
Shelter	2,121	-	-	2,121	4.5	
Nursing care facility	2,049	24	14	2,087	4.4	
Day care	-	1,474	-	1,474	3.1	
Dormitory	-	965	-	965	2.0	
Emergency housing						
facility	890	-	-	890	1.9	
Rehabilitation center	28	603	43	674	1.4	
Social housing facility	630	-	6	636	1.3	
Home half way	_	344	_	344	0.7	
Total	41,269	5,444	815	47,528	100.0	

*Note.: The chosen SSP facilities are those where their capacity was given in all of the Regions

Source: own elaboration.

3 Discussion

Present structure of social services in Slovakia is mainly influenced by demographic development. Actual demographic development is influenced by historical aspects as a consequence of significant differences' formation in the Regions' facilities of social services. In Slovakia, the social services do not cover a current need of the Slovak nation and they face an uneven allocation and insufficiency of financial resources for a very long time. In recent years, the system of the Slovak health care had been declined, including treatment and rehabilitation wards and long-term care institutions. Similarly, there absents a sufficient support from home nursing care in the natural (home) patient's environment. Homes of social services (HSS) are providers of social services exclusively, there absents their interconnection with health care. It is inevitable to build a system of effective and available nursing and rehabilitation care that would be connected with care and other services in order to help a disabled patient in his/her natural home environment as well as for long-term and seriously ill patients. Agencies of home nursing care (AHNC) that have a form of health facility, which provides a complex home nursing care, play a significant role. At present, their significance increases in accordance with a tendency of decreasing the number of hospitalization days in residential health facilities as well as moving a health care from hospital bed environment to home environment. In Slovakia, their insufficient support and financing present the main issue. Inevitable condition of existence of social services facilities is a management, available sources and effective economy of social services facility which will be set correctly. As available studies declare, almost 70 % of expenses of social services facilities are personal expenses. Financial evaluation of their employees is undersized now. Organizations which accept the social services facilities obligation often require grants prompts and projects as a consequence of providing the existence of such facility, while they do not have any resources for investment and development activities. Frequent changes in legislation, which amends an existence and function of these important

services, represent an obstruction in formation of stable links in the social system of the country [2]. An overview of main factors of SWOT analysis of social services development in Slovakia was created on the basis of available resources and results of our own research and seminars of long-term health care. These factors were divided into three blocks: procedural, structural and score (Table 5). "Procedural" factors convey an activity – process that lasts for a certain period of time and whose positive (strength) or negative (weakness) effect is significant and quantifiable. It is easier to implement measures on such factors that would lead to a development or improvement of social services quality in the regions or country. "Structural" factors indicate current or so-called margin of manoeuvre in the process of development or improvement of social services quality. Many times, they are a result of procedural activities and they have a form of, so-called "opportunity" or "threat" of social services development in Slovakia. The score factors are a consequence of terminated procedural activities that were realized in a specific place, i.e. either available opportunities were used in their realization or they were influenced by negative factors from external environment of a social system (in the Table written as "threats").

Tab. 5: Factors of SWOT analysis of social services development in Slovakia

, Dio		ı		
	S	\mathbf{W}	0	T
C	X			
A	X			
С	X			
A	X			
A	X			
C		X		
C		X		
C		X		
C		X		
C		X		
A		X		
A		X		
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C		X	X	
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C4	n			
Strong current potential of the private SSP to provide high	В		X	
quality social services				
Employees' interest in social services continuing education	В		X	
Transformation and deinstitutionalization processes	В		X	
Development and use of volunteering in social services	В		X	
Development of community centers	В		X	
Possibility to finance the projects from structural funds	В		X	
Existing platform for formation of economic incentives to	В		X	
develop community centers				
Fast process of global aging and increasing demand for	В			X
demanding social services, increasing rate of socially excluded				
citizens				
Permanent lack of financial resources to provide social services	В			X
Insufficient inter-departmental cooperation	В			X
Reluctance to finance innovative, alternative or pilot projects	В			X
Constant preference of institutionalized services from recipients'	В			X
side				
"Institutional" social care in the social services facilities and	В			X
constant "institutional" thinking of employees				

Notes: A - Procedural factors, B - Structural factors, C - Score factors, S - Strengths, W - Weaknesses, O - Opportunities, T - Threats.

Source: own elaboration on the basis [3] [6] [7][14]

The given factors and their aggregation into the structural, procedural and score groups help to find their continuity with the National Priorities of Social Services Development aims in Slovakia. These are focused on the aspects of social services availability in accordance with needs, but also requirements to form and maintain the necessary forms of social services and their quality. Also the National Priorities for 2015 – 2020 deals with the issue of supporting development and availability of social services in the areas of concentrated poverty. Aging index development in Slovakia is determined by a poverty risk that was faced by almost three-quarters of a million of people in 2011 (according to EU SILC 2011). It is inevitable to set an efficient system of pensions' provisioning that would prevent an elderly to fall below the poverty line, but also other social transfers, or other social protection tools in the process of its elimination. Significant factor in a given issue is a gender structure of poverty in Slovakia. There is recorded a growth of total rate of poverty risk since 2008 (poverty risk present more in women than men).

Conclusion

Population aging is presently a global demographic process that is evident in many developed countries all over the world. Change of demographic behavior was caused by a fast process of population aging during the last decades. It is inevitable to solve the issues connected to the consequences of population aging in economic and social area, health condition of elderly, the remaining years in health, or disease, life quality of elderly, as well as elderly health care and demand for social and health services with regard to demographic process. However, the negative consequences of population aging may be expected in economic and social sphere in a form of non-sustainable public systems – of pension payment and health care. Therefore, it is necessary to draw attention to the tools of state policy, such as the National Priorities of Social Services Development for 2015 – 2020. Municipalities, cities and self-governing Regions should elaborate these

National Priorities in their conceptual and planning documents, while the outcome should be an analysis of a status of social services provisioning in the Regions, and requirements and needs of their recipients. The partial results of the analysis of social services providers in Slovakia that are present in the article provide a valuable platform for creating of strategic and operative plans.

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References

- [1] ACT NO. 448/2008 COLL. ON SOCIAL SERVICES AND ON AMENDING AND SUPPLEMENTING OF ACT NO. 455/1991 COLL. ON TRADE LICENSING (TRADE LICENSING ACT) AMENDING OF CERTAIN ACTS.
- [2] ARNOLD, J., HOPE, T. *Accounting for Management Decisions*, 2nd edition, Prentice Hall International (UK) 1990. ISBN 10: 0130043915
- [3] BARTÁK, M., GAVUROVÁ, B. Economics and social aspects of long-term care in the context in the Czech Republic and the Slovak Republic EU membership. In: 12th International Scientific Conference "Economic Policy in the European Union Member Countries: Conference Proceedings: 16. 18.9.2014: Karviná: Silesian University Opava, pp. 52-61. ISBN 978-80-7510-045-0
- [4] BARTÁK, M. Health insurance in the Czech Republic, Slovakia, Germany and Austria Common roots, common future? In: E a M: Ekonomie a Management, 2007, Vol. 10, No. 1, pp. 10-17. ISSN 2336-5604
- [5] BLEHA, B., ŠPROCHA, B., VAŇO, B. *Prognóza populačného vývoja Slovenskej republiky do roku 2060*. Institute of Informatics and Statistics, Bratislava, 2013, pp. 70. ISBN 978-80-89398-23-2.
- [6] GAVUROVÁ, B., ŠOLTÉS, V., ŠOLTÉS, M. Meranie zdravia a zdravotných rizík vo vybraných rómskych osadách na Slovensku fakty a reflexie. In: *Nerovnosť a chudoba v Európskej únii a na Slovensku 2: Zborník statí z 2. medzinárodnej vedeckej konferencie*: Košice, 22. 24. októbra 2014, Košice: TU, pp. 188-201. ISBN 978-80-553-1909-4.
- [7] GAVUROVÁ, B., ŠTEFKO, R., BAČÍK, R. The Analysis of Social Services' Structure in a Specific Region and its Significance for Health and Social Policy in Slovakia. In: *Polish Journal of Management Studies*, 2014, Vol. 10, Iss. 2, pp. 43-53. ISSN 2081-7452.
- [8] HALÁSKOVÁ, M., HALÁSKOVÁ, R. Approaches to Standardization of Public Services in the Czech Republic with Focus on Social Services. *Scientific Papers Univerzity of Pardubice*, 2014 Vol. 21, Iss. 30 (1/2014), pp. 40 -52. ISSN 1211-555X.
- [9] HALÁSKOVÁ, M., HALÁSKOVÁ, R. Impacts of Decentralization on the Local Government Expenditures and Public Services in the EU Countries. *Lex*

- *Localis- Journal of Local Self Government*, 2014, Vol. 12, Iss. 3, 2014, pp. 623-642. ISSN 1581-5374.
- [10] JUHAŠČÍKOVÁ, I., ŠKÁPIK, P., ŠTUKOVSKÁ, Z. *Obyvateľstvo v Slovenskej republike a krajoch SR*, vybrané výsledky Sčítania obyvateľov, domov a bytov 2011, Štatistický úrad SR, 2012.
- [11] JUHAŠČÍKOVÁ, I., ŠTUKOVSKÁ, Z. *Obyvateľstvo Slovenskej republiky v kontexte Európskeho roku aktívneho starnutia*. ŠÚ SR, 2012, 90 p. ISBN 978-80-8121-144-7.
- [12] OLÁH, M., SCHAVEL, M. *Úvod do štúdia a dejín sociálnej práce*. Prešov: Vysoká škola zdravotníctva a sociálnej práce sv. Alžbety, n. o. Ústav sociálnych vied a zdravotníctva bl. P. P. Gojdiča 2006. 1.vyd. 176 p.
- [13] REPKOVÁ, K. Dobrovoľníctvo v sektore dlhodobej starostlivosti a aktívne starnutie. *Sociológia*, 2012, Vol. 44, No. 4, pp. 451-475.
- [14] THE NATIONAL PRIORITIES OF SOCIAL SERVICES DEVELOPMENT FOR 2015 2020. Ministry of Labour, Social Affairs and Family of the Slovak Republic. [cit. 2016-01-21]. Available at WWW: http://www.employment.gov.sk/sk/rodina -socialna-pomoc/socialne-sluzby/narodne-priority-rozvoja-socialnych-sluzieb.html.>
- [15] VAŇO, B., JURČOVÁ, D., MÉSZÁROS, J. Population projection of Slovakia until 2050. Institute of Informatics and Statistics. Demographic Research Centre, 2002, Bratislava: Akty.

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