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Management of the Retail Trade Localization in the Regions of the Slovak Republic

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Abstract

In the scope of the retail-trade, the localization decision making is very important since a mistake in the decision and a following inconvenient location of the retail unit leads mainly to serious trade difficulties and subsequently to the crash of the store. The retail stores' expansion in the settlement increases the ability to absorb larger operational capacities, which results also in economic advantages. Based on the conducted analysis of the retail network location in regions of the Slovak Republic, it can be stated that the Bratislava region is the most dominant in the monitored period. This dominant status of the Bratislava region is in accordance with classic localization theories and with the demand oriented export base theory.

Keywords: *Localization index, Localization coefficient, Retail-trade, Retail network localization.*

Introduction

One of the most prominent features of the contemporary retail-trade in Slovakia is imminently its concentration and changing structure of the retail network where small stores and self-service stores were replaced by large-scale business formats like supermarkets, hypermarkets and discount stores. The construction of these large-scale facilities caused several limitations. This is the space for localization models, analyses and various theories dealing with the spatial behavior of shoppers, the public facilities and the satisfaction of the needs in general [1].

In the contemporary society, shopping represents one of the basic and most common forms of social engagement. When monitoring the relation between the shopping and places of shopping, it seems that economic reasons and a rational behavior of consumers are not always valid. This disproves the previously accepted opinion that people prefer a minimum mobility concerning shopping and behave thoroughly economically. It has been shown that a part of consumers chooses the service providers according to the size, attractiveness and the store atmosphere. The practice shows that people frequently do not respect objectivity logic and are not governed by strictly economic aspects. If in some location, a large modern shopping center offering good quality services, a wide range of goods, good prices, etc. were built, not all people from the surrounding area would shop there. On the contrary, consumers from relatively remote locations would be present. This shows that shopping is influenced by a vast scale of time and space variable factors and is a relatively complicated social phenomenon [1-13].

Literature Review

In the scope of the retail-trade, the localization decision making is very important since a mistake in the decision and a following inconvenient location of the retail unit leads mainly to serious trade difficulties and subsequently to the crash of the store. Business-owners or retail chains decide based on the space market potential, logistics links, traffic conditions, as well as according to localization decisions of their competition. Some retail chains prefer to locate their facilities near their competition with similar product mix; others try to enter the market as the first and use the moment of surprise before the competition reach the surroundings. It is common, that retail stores are located in places that expect dynamic changes and the growth of the market potential, e.g. the construction of housing units [1]. Localization is the process of the selection of the place (region) for the specific socio-economic activity. Each region disposes of certain resources and each

activity is characterized by certain needs. The best location for a retail store is that which possesses optimum resources for their socio-economic activities. Thus, it is possible to agree with the opinion that localization is the most important topic of research focusing on the space utilization [14].

The settlement population is to a significant degree influenced by localization tendencies in the diversification of business activities. The expansion of retail stores is the settlement increases the ability to absorb larger operational capacities that yield also economic advantages: the growing operational capacity results in the spread of possibility of the sale of a larger range of goods, possibilities of the division of labor through specialization as well as a better organization of the continuity of service; the increased sale of a larger range of goods decreases investment and operational costs per unit of production; larger retail units have more successful preconditions for their own technological evolution [15].

Localization factors influencing the decision making about the placement of investments include: commercial factors – proximity of the market and consumers, availability of resources, presence of similar companies; national and local factors – language skills, support of the public administration, level of taxation, development area offers; infrastructural factors – quality of highways and railways, telecommunications, proximity of large airports and shipyards; labor factors – quality and availability of the labor force, flexibility of the labor force; costs factors – costs of labor, land, lease; cultural and environmental factors [16].

Hard localization factors include: costs of area, availability of capital and well educated labor force. These are becoming omnipresent and relatively lose their traditional importance for the space allocation of companies and mobility of the labor force. Hard localization factors are those which quality and degree is primarily calculated like: availability of qualified human resources, transport links, costs of lands, areas and buildings, capital, etc. For the highly qualified labor force and companies, the so-called soft localization factors are becoming more important: (1) soft business localization factors that are of the immediate influence on the activity of companies/business-owners, however that are not primarily calculable or measurable. These are the object of a subjective evaluation of each business-owner/company, e.g. image, culture, identity, responsiveness of the public sector, etc.; (2) soft individual localization factors that are the matter of a personal preference of management employees, as well as individual employees and are not of a direct influence on the companies' activities. They mainly influence the work motivation and work effectiveness or the overall availability of highly qualified human resources in the region [9].

Considering transnational companies, they make use of localization factors in different parts of the world and thus the production of goods and services is organized on a transnational level. The main aim of the utilization of localization factors is the maximization of the profit and the accumulation of capital. In case the studied market is saturated and does not offer many possibilities for a further evolution, the expansion to new markets takes place [8].

Method of Data Collection and Analysis

The aim of this article is to evaluate the retail network localization in regions of the Slovak Republic on the NUTS III level (the level of regions).

It is assumed that with the help of selected localization indicators, it will help to a partial explanation of the expansion and the status of the retail network in regions of the Slovak Republic. The major part of empirical studies mentioned in the introduction and the theoretical overview is methodically grounded in the source of primary information gained through the questionnaire survey. Secondary information received from official available sources of the Statistical Office of the Slovak Republic for the monitored period of 2001 – 2010 was used for the purpose of our research. The evaluation process uses the standard mathematical-statistical equations and numerical calculations.

The measurement of the retail network localization is based on Keynesian theories (the so called Export Base Theory). The Export Base Theory considers the export of goods and services as the main factor of the economic prosperity of the region. The part of the economy producing for the regional export or the so-called basic export of the region yields enough revenue for the region that partially acts as a demand for goods of the local (utility) sector that creates the non-basic sector. The developed increase in the production results in a further additional revenue that subsequently attracts additional demand. Thus, creating the multiplication effect, so the increase of the regional revenue has more impact than the growth of the export activity causing it in the first

place [4,10,17,18]. In the scope of the evaluation of the spatial context of retail-trade, these indictors of the localization analysis were used: localization index (IL) and localization coefficient (LQ) [5].

The localization index measures the ratio of the representation of the monitored sector in the region in relation to the population. The localization index is expressed as: [12]

$$IL = \frac{\frac{Eij}{Ei}}{\frac{Sj}{S}}$$

with Eij = number of employees in the i-sector in the j-region,
Ei = number of employees in the i-sector in the country,
Sj = population of the j-region,
S = population of the country.

For values of the localization index, the following equations are valid: IL < 1 the retail sector is represented to the population bellow the proportion; IL = 1 the retail sector is represented to the population proportionally; IL > 1 the retail sector is represented to the population above the proportion.

The localization coefficient (LQ) represents the ratio of the sector concentration in the region compare to the national economy. The localization coefficient for the selected sector (retail-trade) is expressed through the equation [6-7]:

$$LQ = \frac{\frac{Eij}{Ej}}{\frac{Ei}{E}}$$

with Eij = number of employees in the i-sector in the j-region,
Ei = number of employees in the i-sector in the country,
Ej = number of employees in the j-region,
E = number of employees in the country.

For values of the localization coefficient, the following equations are valid: if LQ < 1 than the share of the employment in the retail sector is lower than in the country as a whole and thus it is a non-basic sector; if LQ = 1 than the share of the regional employment in the retail sector is the same as the share of the national employment (the sector is evenly spread throughout the country); if LQ > 1 than the share of the employment in the retail sector in the region is higher than in the country as a whole (the sector produces more than the region consumes, thus it is the basic (export) sector).

Results & Discussions

The analysis of the localization index (Table 1) that measures the ratio of the representation of the studied sector in the region to the population; it can be seen that at the beginning of the monitored decade, none of the regions had a proportional representation of the retail sector in relation to the regional population according to values of the localization index (hereinafter IL).

Values in the Bratislava region in 2001 show above proportional representation (IL > 1; the localization index reached the value of 3.79). In all the remaining regions, the localization index reached the value beneath 1, which means that the retail sector is represented bellow proportionally to the population. It can be seen that the closest to the proportional representation are the Trencin region with the value of 0.93, the Zilina region (0.83) and the Banska Bystrica region (0.81). The following year registered a more significant growth in the Bratislava region, this only supporting its dominance. Other territorial units did not register variation of more than one tenth in relation to values recorded in the previous year. In 2003, the Bratislava region reached the value of 4.04, while the remaining regions reached the value bellow 0.9. This period also shows a divergence in values of the localization index in the remaining regions from values of the best region. In 2006, this divergence deepened resulting in the fact that the remaining regions did not reach the 0.8 value of the localization index, while the Bratislava region reached the value of 4.41. In 2007, the Trencin region reached the value of 0.9, however this change was proved only as a small and short-term fluctuation since the following period registered another fall to the value of 0.78. In 2009, none of the remaining seven regions exceeded this limit (0.8), this being also the case in 2010. The value development of this indicator it can be stated that in Slovakia there is one region (Bratislava region) with a highly above proportional representation of the retail network and 7 regions with the bellow proportional representation of the retail network in the region.

The analysis of the localization coefficient (Table 2) representing the ratio of the sector concentration in relation to the national economy, it is seen that at the beginning of the monitored decade, the retail-trade was not represented proportionally to the national economy in any of regions. In the Bratislava region, the retail network behaved from the very start of the monitored period as a basic sector, since the

Table 1: Retail-trade localization index inindividual regions of Slovakia

	Year / Region	BA	TT	TN	NR	ZA	BB	PO	KE
2001	Number of employees	17256	2621	4295	2986	4374	4071	2950	2353
	Population	599042	550918	604917	712312	692434	661343	791335	766650
	IL	3.79	0.63	0.93	0.55	0.83	0.81	0.49	0.4
2002	Number of employees	20482	2980	4673	3404	4507	4315	3297	2283
	Population	599736	550911	603494	711002	693041	660110	793182	767685
	IL	4	0.63	0.91	0.56	0.76	0.77	0.49	0.35
2003	Number of employees	21065	3134	4550	3567	4437	4534	3281	2248
	Population	599787	552014	602166	709752	693499	658953	794814	769068
	IL	4.04	0.65	0.87	0.58	0.74	0.79	0.47	0.34
2004	Number of employees	23027	3184	4384	3452	4453	4128	3340	2321
	Population	601132	553198	601392	709350	694129	658368	796745	707508
	IL	4.27	0.64	0.81	0.54	0.72	0.7	0.47	0.37
2005	Number of employees	24567	3095	4842	3532	4992	4708	3366	1992
	Population	603699	554172	600386	708498	694763	657119	798596	771947
	IL	4.29	0.59	0.85	0.53	0.76	0.76	0.44	0.27
2006	Number of employees	26737	3282	4276	3642	5385	5261	3381	1985
	Population	606753	555075	599847	707305	695326	655762	800483	773086
	IL	4.41	0.59	0.71	0.51	0.77	0.8	0.42	0.26
2007	Number of employees	27648	3516	5803	3639	5989	5403	3726	2514
	Population	610850	557151	599831	706758	695698	654668	801939	774103
	IL	4.2	0.59	0.9	0.48	0.8	0.77	0.43	0.3
2008	Number of employees	29768	3853	5405	3529	6427	5882	4440	3335
	Population	616578	559934	599859	706375	696347	653697	803955	775509
	IL	4.17	0.59	0.78	0.43	0.8	0.78	0.48	0.37
2009	Number of employees	31104	4137	5135	3721	6197	6108	4855	3037
	Population	622706	561525	599214	705661	697502	653186	807011	778120
	IL	4.21	0.62	0.72	0.44	0.75	0.79	0.51	0.33
2010	Number of employees	32280	4393	4865	3769	5817	6004	4660	3270
	Population	628686	563081	598819	704752	698274	652218	809443	780000
	IL	4.29	0.65	0.68	0.45	0.7	0.77	0.48	0.35

Source: Statistical Office of the Slovak Republic, author's calculations
Legend: IL – localization index; BA – Bratislava region, TT – Trnava region, TN – Trencin region, NR – Nitra region, ZA – Zilina region, BB – Banska Bystrica region, PO – Presov region, KE – Kosice region

localization coefficient was higher than 1 and reached 2.91 in this region. This fact reveals that the retail network was the export sector in the Bratislava region, producing more than the region consumes. In the remaining regions of Slovakia, the localization index was lower than 1 which indicates that the retail network in these regions behaved as a non-basic sector meaning that the share of employment in the retail-trade of the particular region was lower than in the country as a whole. In the following year, the recorded situation improved in only two regions (the Bratislava region with the value of the localization coefficient of 3.14 and the Nitra region with the value of 0.62). Even contrary to the improving situation, the Nitra region was unable to exceed the limit that would ensure the monitored sector to become a basic one. All the remaining regions registered a decrease of the indicator. In 2003, a slight increase is visible in several territorial units, specifically the Bratislava region (LQ = 3.16), the Nitra region (LQ = 0.63), Trnava region (LQ = 0.60) and the Banska Bystrica region (LQ = 0.86). Only the Presov region maintained the value from the previous year (LQ = 0.53) and the Kosice and Trencin regions degraded their values of the localization coefficient once again. In 2004, only the Bratislava region (LQ = 3.41) and the Kosice

region (LQ = 0.39) registered an increase. The remaining territorial units started to diverge from values of the localization coefficient that would ensure the retail-trade in becoming the basic sector in those particular regions. The rest of the monitored decade registers a similar development as the first four years. The analysis of the retail network concentration in individual regions of the Slovak Republic shows a gradual strengthening of the basic sector status of the retail network in the Bratislava region, with final values of the localization coefficient reaching the level of 3.58. The evolution of the retail network concentration in the remaining seven regions is fluctuating near values of the localization coefficient recorded in the beginning of the monitored period. In conclusion, it can be stated that the retail-trade is a basic sector only in the Bratislava region and it behaves as a non-basic sector in all the remaining regions.

Table 2: Retail localization coefficient in individual regions of Slovakia

Year / Region	BA	TT	TN	NR	ZA	BB	PO	KE
2001	2.91	0.59	0.88	0.59	0.85	0.84	0.55	0.45
2002	3.14	0.58	0.84	0.62	0.76	0.82	0.53	0.39
2003	3.16	0.60	0.79	0.63	0.75	0.86	0.53	0.38
2004	3.41	0.57	0.73	0.56	0.73	0.78	0.52	0.39
2005	3.40	0.52	0.77	0.54	0.77	0.82	0.50	0.32
2006	3.59	0.53	0.65	0.52	0.78	0.87	0.47	0.30
2007	3.45	0.52	0.84	0.47	0.81	0.84	0.47	0.35
2008	3.47	0.54	0.74	0.42	0.80	0.85	0.53	0.43
2009	3.45	0.56	0.69	0.45	0.77	0.87	0.56	0.37
2010	3.58	0.59	0.64	0.45	0.72	0.81	0.53	0.40

Source: Statistical Office of the Slovak Republic, author's calculations
Legend: LQ – localization coefficient; BA – Bratislava region, TT – Trnava region, TN – Trencin region, NR – Nitra region, ZA – Zilina region, BB – Banska Bystrica region, PO – Presov region, KE – Kosice region

Conclusions

The issue of the retail-trade development and its influence on the region is currently considered as extremely topical bearing in mind the economic attenuation in the world. The evaluation of the development of retail networks in regions of the Slovak Republic was realized on the basis of selected indicators of localization. During the whole monitored period, there can be seen a further deepening of differences between the Bratislava region and the remaining regions of the Slovak Republic in the field of the spatial organization of the retail network, which only supports the demand oriented export base theory. Influencing the final result of the rankings of individual regions in Slovakia in relation to the studied indicators of localization are apart from the purely economic reasons also the specific behavior of consumers in individual regions and the social structure of the economy what is also implied by existing studies in the field of the new economic sociology and the social economy [2, 3,19,20]. The appropriate development of the consumer behavior and the retail network in individual regions of Slovakia should be aided by the solution of the poverty of the Roma population in marginalized regions [21] and the creation of favorable conditions for the attraction of the foreign capital to stagnant regions in the form of direct foreign investments [15-20,22].

References

1. Spilkova J (2012) Geografie maloobchodu a spotreby. Veda o nakupovani. [Geography of the Retail and Consumption. The science of Shopping.] Praha: Karolinum.
2. Kunc J, Tonev P, Frantal B, Szczyrba Z (2012) Retail gravity models, shopping habits and shopping centres: The case of the brno agglomeration (A Contribution to the study of daily urban systems). Sociologicky Casopis / Czech Sociological Review, 48(5):879–910.
3. Lubelcova G (2012) Social economy: concepts, opportunities, risks. Sociologia – Slovak Sociological Review, 44(1):83-108.
4. Maier G, Todtling F (1998) Regionalna a urbanisticka ekonomika. Regionalny rozvoj a regionalna politika [Regional and Urban Economy. Regional Development and Regional Policy]. Bratislava: ELITA.
5. Michaeli E, Matlovic R, Istok R et. al. (2009) Regionalny rozvoj pre geografov [Regional Development for Geographers]. Presov: PU v Presove.
6. Pavelkova D et. al. (2009) Klastry a jejich vlyv na vykonnost firem [Clusters and their influences the performance of companies]. Praha: Grada Publishing.

7. Skokan K (2002) Industry Clusters in Regional Development [online]. Ekonomicka revue, 5(2):50-60, http://mpra.ub.uni-muenchen.de/12372/ accessed on 6 December, 2012.

8. Skopal J, Kralikova K, Kralik J (2008) Vyvoj a soucasny stav globalniho podnikani [Development and Current Status of Global Business]. In. Jezek J (Ed.) Nadregionalna spolupraca Trnavska: Zbornik prispevkov z medzinarodnej vedeckej konferencie konanej 16.-17. oktobra 2008 na Vysokej skole v Sladkovicove. Sladkovicovo: VSS, pp. 38-71.

9. Slach O (2008) Kreativni odvetvi a jejich prostorova organizace [Creative Sectors and their Spatial Organization]. In. Jezek J (Ed.) Nadregionalna spolupraca Trnavska: Zbornik prispevkov z medzinarodnej vedeckej konferencie konanej 16. - 17. oktobra 2008 na Vysokej skole v Sladkovicove. Sladkovicovo: VSS, pp. 85-93.

10. Sloboda D (2006) Slovensko a regionalne rozdiely: Teorie, regiony, indikatory, metody [Slovakia and Regional Differences: Theories, Regions, Indicators, Methods].

11. Statistical Office of the Slovak Republic. http://px-web.statistics.sk/PXWebSlovak/ accessed on 6 December, 2012.

12. Tej J (2007) Hodnotenie regionalneho vyvoja zamestnanosti v Slovenskej republike [Assessment of the Regional Development of the Employment in the Slovak Republic]. In. Klimova V (Ed.) X. Mezinarodni kolokvium o regionalnich vedach - sbornik prispevku z kolokvia konaneho v Pavlove 20. - 22. cervna 2007, Brno: Masarykova univerzita, pp. 37-43. http://is.muni.cz/do/1456/soubory/katedry/kres/4884317/sbornik2007.pdf accessed on 6 December, 2012.

13. Walmsley DJ, Lewis GJ (1984) Human Geography: Behavioural Approaches. London: Longman.

14. Jezek J et. al. (2007) Budovani konkurenceschopnosti mest a regionu v teorii a praxi [Creating of the Competitiveness of Towns and Regions in the Theory and Practice]. Plzen: Zapadoceska univerzita v Plzni.

15. Bucek M et. al. (1992) Priestorova ekonomika. Bratislava: ES EU.

16. Hofman J, Jezek J, Starzyczna H, Blechova B, Janeckova L, Kolibova H, Pellesova P, Tuleja P, Vastikova M (2005) Exogenni a endogenni faktory regionalniho rozvoje - zhodnoceni empirickych zkusenosti a teoretickych pristupu k polum rozvoje [Exogenous and Endogenous Factors in the Regional Development – Assessment of Empirical Experiences and Theoretical Approaches to the Poles of Development]. Karvina: Slezska univerzita v Opave.

17. Blazek J (1993) Regional Development and Regional Policy: Main Approaches in Countries of the Western Europe. In. Sykora L (Ed.) Teoreticke pristupy v soucasne geografii [Theoretical Approaches in the Contemporary Geography], Praha: PrF UK Praha, pp. 120-146.

18. Blazek J, Uhlir D (2002) Teorie regionalniho rozvoje: Nastin, kritika, klasifikace. [Theoretical Approaches in the Contemporary Geography] Praha: Karolinum.

19. Hofreiter R (2011) The new economic sociology and the structural embeddednes of the market. Sociologia – Slovak Sociological Review, 43(5):528-549.

20. Kotulic R (2008) Neoclassic economic growth model and his influence on development of region. Politicke vedy, XI(1-2):127-136.

21. Zelinsky T (2011) Microfinance: An alternative tool for alleviating roma poverty in the marginalized regions. Sociologia – Slovak Sociological Review, 43 (1):57-88.

22. Adamisin P (2008) Macroeconomic Coherences of Regional Development in the Slovak Republic. In. Jedlicka P (Ed.) Sbornik vybranych prispevku z vedecky konference Hradecke ekonomicke dny 2008, Hradec Kralove: Gaudeamus, pp. 7-12.