

## **Consumers preferences of shopping centers in Bratislava (Slovakia)**

**Kristína Bilková, František Križan\*, Peter Barlík**

*Comenius University in Bratislava, Slovakia*

There have been changes in the shopping behavior and preferences of consumers in the post-communist countries caused by political changes after 1989. Slovakia is not an exception, and it has been observed a change not only at the consumers' level but also in retail stores. A notable bearer of such changes was the construction of big shopping centers that were a new phenomenon in shopping. They quickly became popular and changed spatial and shopping patterns of consumers. The main aim of this study is to analyze and evaluate the shopping preferences of consumers based on the example of the capital city – Bratislava (at the level of urban districts). The database consists of results of a questionnaire survey carried out in 2011. Respondents were interviewed inside the shopping center. The partial aims focus on the analysis of consumers' perceptions, the frequency of their shopping and the mode of transport used for shopping. One of the goals of this study is also to evaluate the perception of consumers in terms of the catchment areas of the chosen shopping center, as well as the perceptual classification of retail in the given area and the accessibility of stores.

**Key Words:** *consumers' preferences, shopping centers, catchment area, Bratislava.*

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### **Introduction**

One of the most noticeable signs of the current retail is undoubtedly its globalization that has taken place in various directions (Birkin et al. 2002, Wrigley 2000, Wrigley et al. 2005). On the one hand, a role of strong transnational corporations has been growing, and it has brought the foreign investments. On the other hand, a reaction to this is the cooperation and integration tendencies of small businesses.

#### **\* Corresponding author**

*Address:* Department of Regional Geography, Protection and Planning of the Landscape Faculty of Natural Science, Mlynská dolina, Ilkovičova 6, 842 15 Bratislava, Slovakia.

*Phone:* 1 | *Email:* krizan@fns.uniba.sk

Retail in post-communist countries has undergone a significant transformation of its spatial-organizational structure (Križan and Lauko 2014, Kunc et al. 2012, Spilková 2012, Szczyrba 2005, Wilk 2013) but also, in this context, the consumer and customer themselves have been globalized, their shopping behavior and habits, as well as their preferences, have been changing (Spilková 2003). From the point of view of the issue of shopping behavior, it is needed to mention that taking into consideration the shopping possibilities before 1989, there has been a radical change of the Slovak, or more precisely, the Czechoslovak society caused by globalization (Kunc et al. 2012, Maryáš et al. 2014, Mitríková 2008, Trembošová 2012).

These changes became so pronounced that a scientific discourse about this new social phenomenon started (Wrigley and Lowe 1996). It is appropriate to draw the attention to spatial relationships in connection with the distribution of people's activities that are adjusting to new social conditions (Kunc et al. 2012). It should be also noted that time and spatial expression of changes in the consumer in post-socialist countries (Slovakia included) has been more intensive and remarkable than in countries with a traditional market economy in Western Europe and the USA.

An important change in the retail occurred after 1948 with the change of the ownership status. Prior to 1948, the private ownership businesses formed the majority of businesses, but the situation started to change after the nationalization of commerce and the formation of state commerce. Before 1948 the private ownership of the business formed 88% of all the business, in 1949 it was 25% and in 1950, the proportion of private businesses dropped to 9%. After 1960, private ownership was nonexistent in the retail sector.

This process of closing small stores was connected to the socialization of commerce and was stopped in the 1950's. It was a characteristic of socialism to increase the number of stores in cooperatives (Jednota). Both the number of stores as well as the gross leasable area developed unevenly in comparison to the volume growth of the sale. The network of retail businesses was underdeveloped and it did not create sufficient shopping opportunities in comparison to the number and capacity that the retail sector had during this time period (Križan et al. 2016).

Compared to developed European economics, the retail business in former Czechoslovakia was underdeveloped (Fertal'ová and Szczyrba 2006, Pulpitlová 2003, Szczyrba 2004, 2005), and negatively assessed in many aspects (Krásný 1992):

(i) Density of the retail network (expressed by number of stores per 1,000 inhabitants) was very low (approximately half the average of Western Europe). Specific and noteworthy was a limited range of the stores in large cities.

(ii) The retail capacity (retail floor area per 1,000 inhabitants) was also very low (only quarter of the average level in Western-European countries). The goods (especially foods) supply to the stores was quite limited.

(iii) Inappropriate conditions in the retail sector stemming from the density and capacity levels were related to structural deficits, such as insufficient occurrence of non-food stores, absence of modern large-scale retail stores, as well as significant differences in role of retail at local and regional levels in terms of consumer needs satisfaction.

As noted Križan et al. (2016) the transformation from the centrally-planned economy to a market economy became a revolution for the economy of the country, which manifested itself also in the retail sector. The transformation in the retail sector had different intensity in time and its manifestation varied in space. By analyzing all of the changes in Slovak retail it is then possible to identify several stages of transformation (cf. Kunc et al. 2013, Trembošová and Dubcová 2013): (i) Atomization of the retail sector, (ii) Internationalization/Globalization of the retail sector, (iii) Consolidation of the retail sector. Transformation process includes a variety of interrelated, interconnected and complementary changes (Mitríková (2008). It can be concluded that each of these stages has its characteristic attributes and manifestations in urban and rural regions.

Before 1989, the shopping habits of the Slovak (or Czechoslovak) population were strongly dictated by directives of the centrally controlled socialist economy in domestic business. They determined strictly not only the place of consumption but also what would be sold there. The location of stores did not respect the distribution of purchasing power and so the result was that in the centers of most towns and cities there were a lot of stores and, on the other hand, there was a lack of adequate construction of shopping centers in the newly constructed housing estates (Fertal'ová 2006b, Szczyrba 2005, Trembošová 2010). After the following large-scale privatization and liberalization of the economic environment, first stores of a foreign retail chain started to appear (the first Tesco shop was open in Nitra in 1999). New patterns of consumers' shopping behavior began to be formed (Fertal'ová 2006a, Trembošová 2009a), and space became the key attribute that, similarly to social and cultural aspects of shopping, acquired a new dimension (Kunc et al. 2012, Spilková 2012).

The new dimensions of large chains of stores and shopping centers replaced then traditional forms of retail business. Shopping centers became the bearers of change in the shopping behavior of consumers. Not only for young but also for retired people going to the shopping center became an attraction, amusement, leisure time activity or better to say, a form of the social occasion (Spilková and Radová 2011, Kunc et al. 2011, 2012). Thus, a new concept of shopping includes a recreation attribute in itself and C. Guy (1998) called this new way of consumers' behavior as leisure shopping, and shopping became a certain form of tourism (Mitríková et al. 2012, Timothy 2005).

Consumers or better to say, shopping activities and its spatial expression is closely related to the organisation of retail system and location of individual shopping units. From this point of view, observing the relationships between shopping behavior and spatial structure can be considered very interesting and suggestive (Grossmanová et al. 2015). For this reason, the topic of shopping behavior is being discussed more and more in geography literature. Papers and studies focusing on the geography of retail are strongly interdisciplinary (Wrigley and Lowe 1996, Crewe 2000, Miller et al. 1998).

This gives rise to an important cooperation among geographers, economists, sociologists and cultural anthropologists. Despite the fact that evaluating the shopping behavior of consumers and their qualification are interesting topics not only for marketing and sociology but also for geography (see Spilková 2012), it needs to be noted that this aspect of retail research is partially absent in the Slovak literature (cf. Križan and Lauko 2014).

The main aim of this paper is to analyze and evaluate the shopping preferences of consumers. The case study is focused on chosen elements of shopping behavior of consumers based on the example of the capital city – Bratislava (on the level of urban districts). The database consists of results of a questionnaire survey conducted in 2011. Partial aims focus on the analysis of respondents' perceptions, the frequency of their shopping and the mode of transport used for shopping. One of the aims of this study is also to evaluate the perception of consumers in terms of the gravity of the shopping center.

**Methods and data**

One of the most commonly applied approaches to evaluating the consumers' behavior in the issue of retail is the (empirical) behavioral approach (Gilboa and Rafaeli 2003, Guy 1998). Besides the motivation of visiting the given facility, the most frequently evaluated phenomena are also loyalty characteristics and factors influencing the choice of the shop based on subjective feelings of the consumer (Teller and Elms 2012).



Figure 1. Study area

**Table 1.** The distribution of respondents by districts and urban districts in Bratislava.

| District       | Borough                                                                   | Respondents [%] |
|----------------|---------------------------------------------------------------------------|-----------------|
| Bratislava I   | Staré Mesto                                                               | 16,2            |
| Bratislava II  | Podunajské Biskupice, Ružinov, Vraku -                                    | 28,3            |
| Bratislava III | Vajnory, Raca, Nové Mesto                                                 | 10,6            |
| Bratislava IV  | Devín, Devínska Nová Ves, Dúbravka, Karlova Ves, Lamac, Záhorská Bystrica | 14,0            |
| Bratislava V   | Cunovo, Jarovce, Petržalka, Rusovce                                       | 30,9            |

Source: own surveys.

**Table 2.** Selected characteristics of respondents.

| Sex   | Share [%] | Average age | Education [%] |      |       |       |       |
|-------|-----------|-------------|---------------|------|-------|-------|-------|
|       |           |             | A             | B    | C     | D     | E     |
| Men   | 42,3      | 37,5        | 0,25          | 1,25 | 11,37 | 44,30 | 42,82 |
| Women | 57,7      | 36,3        | 0,15          | 1,22 | 10,17 | 49,55 | 38,91 |
| Total | 100,0     | 36,8        | 0,19          | 1,23 | 10,68 | 47,33 | 40,57 |

\* A (uneducated), B (elementary), C (secondary without the GCE), D (secondary), E (university).

Source: own surveys.

It is possible to identify several approaches to studying the consumers' behavior (Birkin et al. 2002, Jones and Simmons 1990). Since a longstanding problem of the Slovak geography is a database of retail that almost disappeared after 1990, there has been a period in publishing on retail when practically the only source of data is one's own conducted field work. The research was also applied in this study in the form of a questionnaire survey. It is focused on the analysis of shopping behavior of consumers in the urban environment. It was carried out in February – May 2011 in the capital city of Bratislava (Kita and Grossmanová 2014). The obtained sample consisted 11,389 respondents – customers shopping in the retail stores located in the given city boroughs of Bratislava. It was a quota sampling of respondents in which permanent residency, age, and other personal characteristics were taken into consideration.

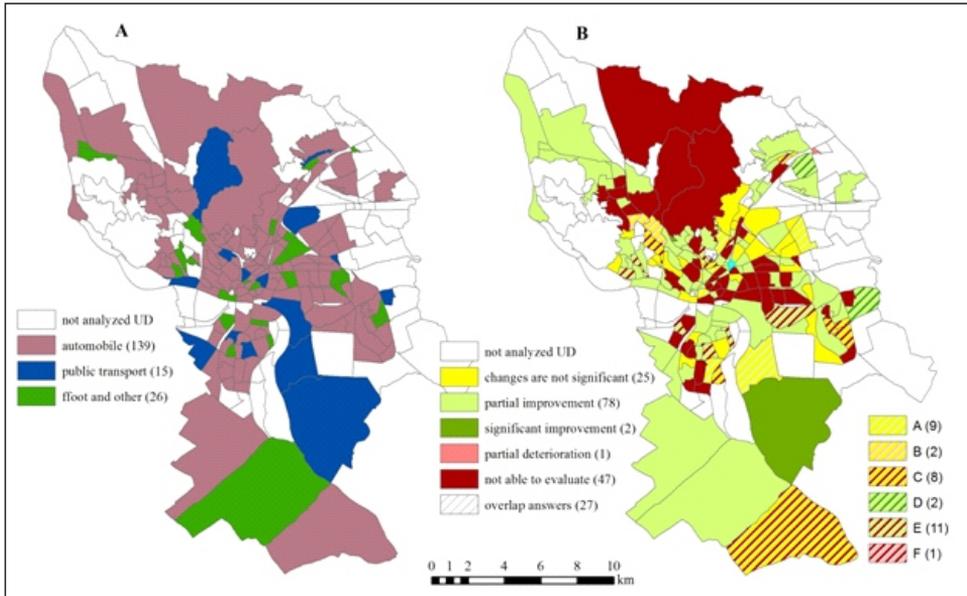
The questionnaire consisted of several parts (cf. Kita and Grossmanová 2014, Križan et al. 2014, 2015). The first part comprised of general questions considering the respondents themselves (sex, age, education, income) and also their addresses for the purpose of their location. Subsequently, a layer of the exact location of answers to the given street, or more precisely, to the urban circuit was created by the process of geocoding. By this, it was possible to allocate the spatial attribute to perceptions of consumers/respondents. Another part of questions was focused on the shopping behavior of consumers and on the frequency of shopping (for example, 'How often do you shop ...?' or 'What day do you shop the most...?'), the mode of transport ('How do you get to the shop?'). The last part included three questions with the aim to analyze the catchment areas of shopping centers in the territory of Bratislava.

With respect to the study area size and number of respondents, the research was carried out in several steps. The first stage included collecting the most of the questionnaires which were then processed and interpreted. The following

**Table 3.** Shopping transport means choice.

| Transport mode   | Respondents [%] | Average time [min] |
|------------------|-----------------|--------------------|
| Automobile       | 41,0            | 13,6               |
| Public transport | 30,4            | 16,2               |
| Foot and other   | 28,6            | 12,1               |
| Total            | 100             | –                  |

Source: Križan et al. (2014).

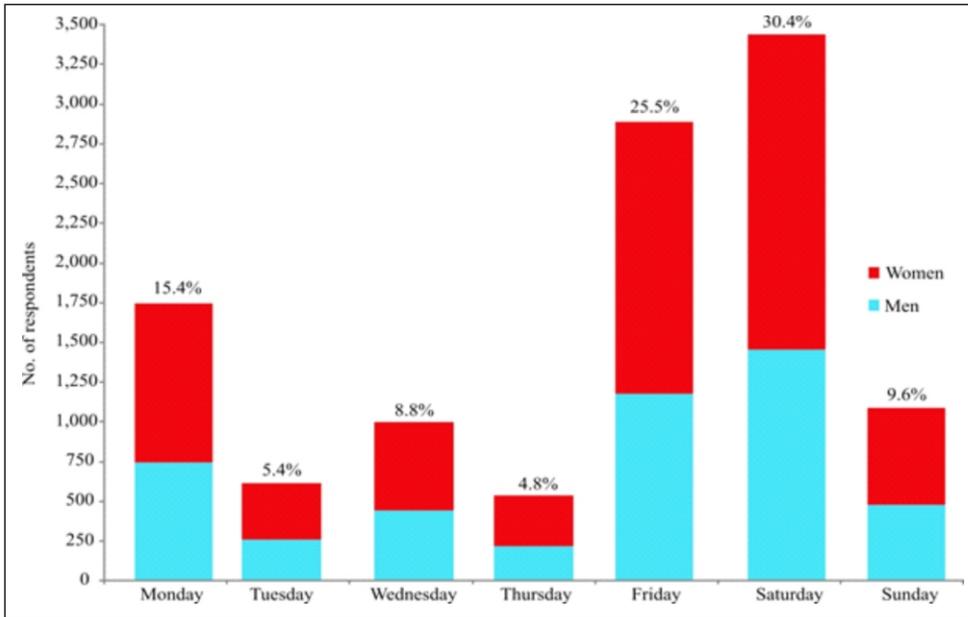
**Figure 2.** The dominant mode of transport (2A) and changes in quality shopping (2B). Source: own surveys.

research was targeted at specific respondent groups to fulfil the necessary representative size of the respondent sample (Bryman 2012), carried out by an improbability quota selection of respondents (Rochovská et al. 2014).

Basic methods of the analysis of the questionnaire survey were the perceptual and comparative analyses that are based on the description. The geographical information systems (GIS) were used as an interpretation tool.

## Analysis

The research was conducted on an intraurban level, and urban districts (UDs) were the basic territorial units of observation. Definition of the UD according to M Barbiar et al. (1993, p. 9): 'Urban district is formed by aggregation of housing, including the territory adjusted for the needs of the settlement, and also for manufacturing, technical and other facilities, as well as for nature.' Bratislava is divided into 5 administrative districts (Bratislava I-V) and 17 boroughs that all together form 263 urban districts (figure 1). There are 46 uninhabited UD and in 37 UD the representative respondent sample was not obtained. The research analyzed 180 UD (68.4% of all UD) in which lives 99.6% of the whole Bratislava population.



**Figure 3.** The frequency of shopping according to the days of the week.  
Source: own surveys.

By the questionnaire survey a representative sample of 11,389 valid questionnaires was gained. The highest share of respondents in the sample was districts of Bratislava V and II that together formed 59.2% (Table 1). Other districts – Bratislava I, III and IV represented 40.8%. The first part of the questionnaire survey focused on gaining the data about respondents that are summarized in table 2. Most of the respondents were women (57.7%) with mainly secondary and higher education.

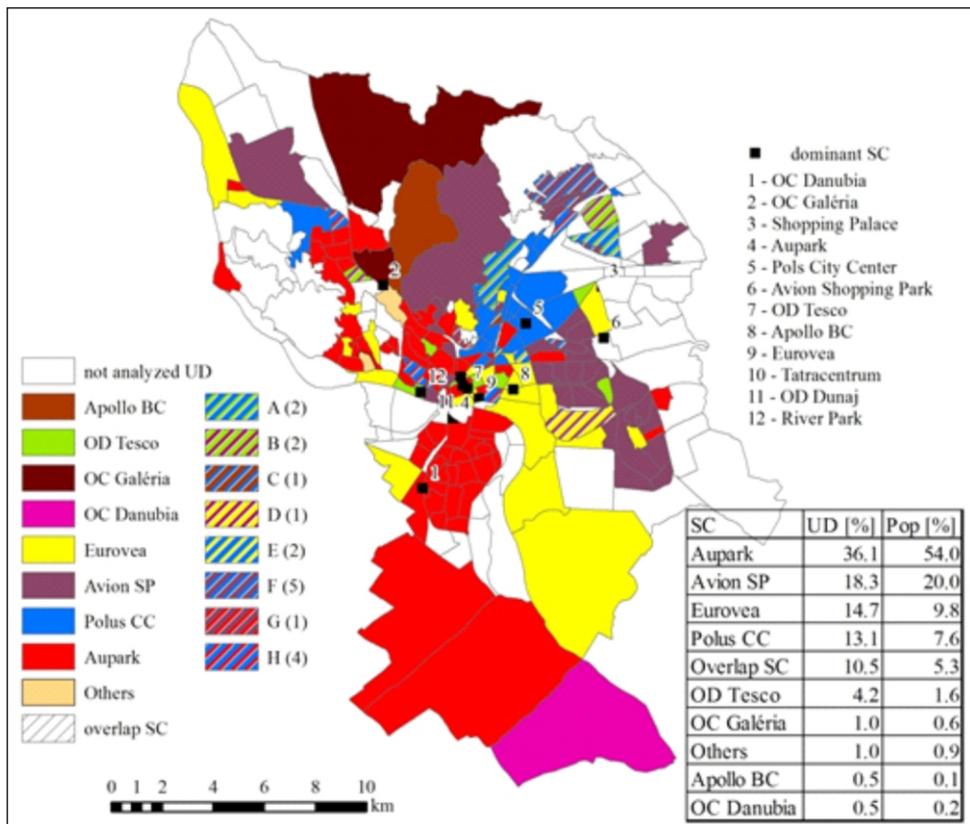
In the second part of the questionnaire, there were questions that focused on frequency and transport modes for shopping (Križan et al. 2014). It can be stated that the most common means of transport for shopping is the car, and the average length of traveling was 13.6 minutes (table 3). The second most frequent means of transport was the public transport used by 30.4% of consumers and from all the analyzed means the average time spent commuting to the shop by the public transport was the longest (16.2 min). On the contrary, from all other means, respondents stated the shortest average time (12.1 min) needed for getting to the shop was on foot. This might relate to the fact that consumers selected the stores that were close to their residence. Average time spent shopping per week was higher for female (119.3 min) than the average time of all respondents. In contrast, male consumers spent less time shopping than women and their average time spent shopping per week was 95.5 minutes. The most common frequency of shopping was 'several times a week' (44.4%). Together with consumers shopping 'once per week' it represented 69.2% of all respondents' answers. Shopping 'once or twice per month' was characteristic of nearly 7% of respondents.

From the spatial differentiation, the following conclusions considering the use of means of transport in the given UDs in Bratislava (figure 2A) can be stated. In 77.2% of the analyzed UDs (according to the highest number of respondents' answers), the dominant means of transport was a car. From the spatial

concentration point of view, in this case, an even distribution was identified throughout the whole Bratislava. The least preferred was the public transport that was stated as a dominant transport mode to retail stores by respondents living only in 8.3% of the UD. The public transport was chosen mainly by respondents from the UDs in the city center, wider city center, as well as in its peripheral parts.

The cause of such locations can be found in various facts: either they are the locations with a good connection to the public transport or, in the case of remote districts, they are the locations with a significantly higher concentration of low-income groups with a lower level of motorization. A denser concentration of UDs in which the respondents went shopping mainly on foot was recorded in Karlová Ves, Petržalka, Nové Mesto, Ružinov, Rusovce and partially Staré Mesto. It is suggested that in these UDs the stores are localized close to their homes (denser concentration of stores in these districts). One of the evaluated areas was also the analysis of changes in quality of shopping in the last period. Results of this analysis are illustrated in figure 2B. Relatively a numerous group of respondents was not able to evaluate the changes that have happened in the last period and it was most frequently answered in 26.1% of the UDs.

However, the most numerous group of respondents stated that there have been partial improvements (43.3% of analyzed UDs). Based on the given answer, it is not



**Figure 4.** Catchment areas of shopping centers in Bratislava. UD - urban district, SC - shopping center, Pop - population. Source: own surveys.

possible to define more distinctive spatial aggregations of UDs in the territory of Bratislava from the spatial differentiation point of view. '*Changes are not significant*' was the most usual answer of respondents living in the wider center of Bratislava. They represented 13.9% of the whole number of the analyzed UDs. A large group is formed by UDs in which two answers overlap (17.3%). They are illustrated in figure 2B in colorful hachures according to the two common responses (for example, type A represents UD in which the most numerous answers were '*Changes are not significant*' and '*Partial improvement*').

The attention was also paid to the analysis of the frequency of shopping according to the days of the week (figure 3). More than a half of the consumers who went shopping throughout the whole week were women and the most frequent days were Friday and Saturday. This relates to the trend of big families shopping after finishing the working week and at the beginning of the weekend (cf. Lauko et al. 2008). The least common were Tuesday, Friday and Thursday, and also Sunday. It can be assumed that this relates to the tradition of spending the Sunday time and lunch together as a family.

The last part of the research dealt with defining the catchment areas of the shopping centers (SC) according to the respondents preferences. A general shopping center definition according to the International Council of Shopping Centers (ICSC): a shopping center is a set of retail and other business facilities, which has been planned, built, owned and managed as one entity, usually with proprietary parking availability. The most common combination is a shopping gallery and an anchor tenant (magnet) in the form of a hypermarket or a larger supermarket (ICSC 2005).

Since it is still difficult to find uniform criteria for shopping center classification, we shall methodically observe the European ICSC definition with the limit value of 5,000 square meters of gross leasable area.

Figure 4 illustrates the zones of influence of the shopping centers, their 'gravity influence' and ability to attract the consumer, or more precisely, its territory size according to the urban districts. Most of the respondents (or better to say, it was the most numerous answer within the UD) said that they did their shopping mostly in Aupark shopping center (36.1% from the UD), and so its influence sphere became the largest (Bilková and Križan 2014). However, it is important to note that in these catchment UDs there lives 54% of all inhabitants of Bratislava, and this also confirms the most profound influence of Aupark. From the spatial location point of view, they are the UDs that are concentrated in the administrative district Petržalka (it relates to a good accessibility of this center), but also more remote UDs (in some cases they are also the UDs lying in the peripheral parts of Bratislava). This can be explained by the fact that Aupark offers its consumers a much wider scale of retail services than other shopping centers and the customers choose it even though the distance from their home is often much longer than to the shopping centers that are closer to their homes (for example, OC Danubia). On the other hand, Aupark is located in the vicinity of the largest housing estate in Bratislava and, therefore, its potential sphere of influence becomes larger.

Also Avion Shopping Park (Avion SP) can be identified as a more marked catchment area. It was stated as the second most visited shopping center (18.3%). Its catchment area comprises of the analyzed UDs from the administrative districts of Ružinov, Podunajské Biskupice, and Nové Mesto. In these UDs, there is 20% of

the whole population of Bratislava. It can be said again that the influence sphere of Avion SP, or better to say, its ability to attract the customers, overlap the potential influence spheres of other shopping centers that are located in the closer proximity to the chosen UD (Križan et al. 2015).

A different arrangement of the shopping zones can be observed in the case of Polus City Center (Polus CC). Even though the respondents indicated Polus CC for the most visited place for the purpose of shopping 13.1%, of the UDs and overall there lives 7.6% of the whole population of Bratislava, the influence zones are more tightly bound to the shopping center Polus CC itself (this was different in the previous two shopping centers). In the close proximity to the shopping center this concentration was the most intensive, however, with the increasing distance this concentration decreased and the dominant influence was gained by other shopping centers. Eurovea also marked a strongly dominant influence share in the researched UDs (14.7%) – where it was stated as the most visited shopping place. Within the spatial differentiation, it can be said that there is a partially mosaic structure of influence spheres.

It could be also assumed that this spatial arrangement was influenced by the fact that, during the studied period, Eurovea was the newest shopping center in Bratislava. The result of this fact was that it did not manage to build its strong influence (meaning the closer concentration on the shopping center itself) as the previously mentioned shopping centers but there is a quite significant share of the population (9.7%). Other shopping centers dominated in 7.2% of the analyzed UDs (figure 4).

A particular category is formed by the UDs in which there were identified two shopping centers (10.5% UDs) where the respondents from the given UD most frequently do their shopping. They are those UDs where the influence of two neighboring shopping centers overlapped each other, and so it was not possible to solidly identify which shopping center was dominant in the given UD. Avion SP and Polus CC can be given as the most frequent examples of such overlap. Since these shopping centers are located quite close to each other, also their influence spheres partially overlap and in some UDs the respondents stated both of them as the most visited places for shopping.

## **Discussion and conclusion**

Although, many studies are focused on the topic of shopping centers in the Slovak geography (e.g. Civán et al. 2014 Fertalová 2005, 2006a, 2006b, Fertalová and Varga 2007, Mitříková 2008, Trembošová 2009a, 2009b, 2009c, 2012), the empirical study of the shopping behavior (in these dimensions) has not been conducted in the Slovak geographical society (cf. Križan et al. 2014, 2015). We conclude that the evaluation of the consumers shopping behavior and preferences of the shopping centers, as a dynamic element of Central and Eastern European countries is quite complex and to some extent subjective task.

Regarding the transformation changes that happened and still have been going on in the Slovak retail chain and in the shopping behavior of inhabitants, the study of these questions has its importance. The given study is based on the field survey that proved to be inevitable and greatly beneficial in researching of the retail

behavior in Bratislava (Bilková and Križan 2014, Kita and Grossmanová 2014). Based on the referred analysis and perceptions of respondents, several generalizations could be stated for Bratislava as a model region and also for other post-communist countries. With the growing level of the retail chain, the consumer has more possibilities to choose among various alternatives of buying the same sorts of goods and so they have the possibility to prefer qualitative to the quantitative aspects of their decision-making. From the results of consumers' preferences in the urban environment of the post-communist city, it can be concluded that regarding the frequency, shopping once, or more precisely, twice per week (or shopping realized at the weekend) were the most frequent answers.

The preferred means of transport was a car by which the consumers went shopping in more remote large size stores. Therefore, in comparison with going on foot, the time necessary to transport was longer. Going on foot represented the shortest average time necessary to transport to a shop since it can be assumed that this shopping was realized by consumers in their surroundings. As the study by Križan et al. (2014) confirms, an important factor that influenced the choice of transportation mode from the residence to the shop, was the income. With the growth of the income, there was an increase in the share of cars used as a means of transport. Other factors might be, for example, the time necessary to transport or in the case of the public transport, frequency of its service. From the analysis of perceptions focused on quality of shopping, the consumers most frequently agreed on the fact that some improvement in conditions of shopping was made (cf. Kunc et al. 2012). The respondents often answered: *'I can't assess'* and so it can be assumed that these respondents might have been those who within the suburbanisation of the hinterland of Bratislava (Šveda and Podolák 2014) or for other reason could not assess the past situation in Bratislava.

A higher attention of the authors was paid to the place of the most visited part of the shopping center itself. By this analysis, various sphere zones of the individual shopping centers were drawn. From the results of the research, it can be stated that the most important factor in choosing the shopping center was not its distance, or accessibility (Križan et al. 2014, 2015). In more cases, there were identified the UDs that were much further from the shopping center that was said to be the preferred place for shopping by the respondents, even though in their close surroundings there were other shopping centers (this aspect was the most significant in the case of Aupark). It can be assumed that important factors in choosing the shopping centers influencing the perceptions of consumers are for example, a larger selection of the offered goods, higher quality, more possibilities for leisure activities (for example, cafés, restaurants, confectioner's stores, fitness center, cinema, etc.), opening hours, parking possibilities (in the context of increasing motorization) and others (cf. D bek 2015, Teller and Alexander, 2014, Teller and Reutterer 2008). Within this analysis, there were identified four most visited shopping centers (Aupark, Avion Shopping Park, Eurovea and Polus City Center) in Bratislava. They represent 82.2% from all analyzed UDs with 91.3% of Bratislava inhabitants (Bilková and Križan 2014).

In general, we can state that the consumer preferences analysis may well serve as a marketing decision tool in planning practice (Cliquet 2006, Kita 2013). Knowledge on consumer perceptions and preferences are considered as decisive for success at free market competition (Jones and Simmons 1990). Adaptation to

market requests means adaptation to a target consumer group's demands. This brings differentiation among particular shopping centers leading to a wide spectrum of shopping centers and individualization of preferences (Križan et al. 2015). The outcomes of the study may be utilised in marketing analyses and strategies of individual shopping centers but also in planning and research activities (decision-makers, scientific research, etc.) focused on future trends in urban retail environment.

This study has several limiting factors. The first one is a particular specification of the shopping behavior of consumers in the post-communist city. Conclusions of the analyses can differ from other European or North American cities. It can be stated that construction of the shopping centers in the capital city of Bratislava has not been finished yet. Since 2011, there have been several shopping centers built, and they have an influence on changes in identification of the catchment area of the chosen shopping centers. This comparison took into consideration not only spatial but also changes in time. A trend of changes in the shopping behavior in the terms of shifting from quantity to quality, or from the shopping centers (hypermarkets and supermarkets) to farmers' markets has not been analyzed yet (Spilková et al. 2013). These topics of the geography of retail represent a draft of the future research in topic of urban retail in the post-communist Bratislava.

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