

## IMPACT OF RECENT SHOPPING CENTER DEVELOPMENTS ON COMMERCIAL REAL ESTATE VALUE IN THE CITY CENTER OF ŽILINA

<sup>a</sup>ALEXANDRA POKORNÁ

*Institute of Forensic Engineering of University of Žilina, Ulica 1.mája 32, 010 26 Žilina, Slovakia  
email: [sandrapokorna@yahoo.com](mailto:sandrapokorna@yahoo.com)*

**Abstract:** The structure of market value of commercial real estate in the city center of Žilina was recently modified due to the development of two major shopping centers that dramatically increased the supply of commercial leasable area. This article aims to identify the key aspects influencing the drop in the rental asking prices for retail and office spaces with an effort to describe the most important ones including the increase of gross leasable area, availability of free parking, changes in opening hours and worsening of day light conditions in the existing surrounding indoors spaces.

**Keywords:** market value, commercial real estate shopping center.

### 1 Introduction

The city of Žilina lies in the northwestern part of Slovakia in the Upper Váh region in the north temperate zone with continental climate. Its geographical location made it into an administrative, economic and cultural center and a major international road and railway junction resulting in its attraction not only to local inhabitants but also to a considerable number of visitors and by-passers from a wide trade area. The population of Žilina is 84,290 (as of Oct.31, 2012) with the metro area population mounting to over 159,000 inhabitants and trade area of over 680,000. The city and its vicinity are home to significant industrial employers including Kia Motors, Siemens, Metsä Tissue, Váhostav, etc. Žilina also acts as a regional business and retail center and houses a University with more than 12,000 students.

### 2 Brief History of Shopping Centers in Žilina

After the velvet revolution in the 1989, the changes in the political constitution of former communist countries led to a fast growth of demand for retail industry. Prior to the transformation to open market economy, Žilina had one venue with 5,000 square meters of gross leasable area on 3 floors, which could be characterized as a shopping center by current standards<sup>1</sup> that opened in 1975. It is located in the city center as seen on the map in Fig.1 where it replaced mixed-use town houses that were torn down after expropriating the original owners by the communist regime. Apart from changing ownership from state to various companies in time intervals (Tesco at present), it has undergone modernization of interiors transforming most of the leasable units into a single brand store. Parking for the building is located outdoors on ground level and consists of 12 spaces.

Unlike expected, the first newly built post-communist shopping center in Žilina was not built on the outskirts of the city with an easy access by vehicles. On the contrary, open on Nov.16, 2001, the shopping center Dubeň was built between the mass housing area Vlčince and a town forest park following a controversial modification of town planning regulations where areas formerly reserved for sports were turned into land for commercial use. This encouraged other retailers to open their stores in the neighborhood, where all buildings including the shopping center have a ground level outdoor parking with more than 1,000 spaces for Dubeň and the area is serviced by a single road with three roundabouts. Unfortunately, lack of diligent traffic planning and its integration to the modified town plan has led to frequent traffic jams occurring permanently to this day.

On Dec.7, 2007 shopping center Max was open, located on the fringe of mass housing Solinky offering gross leasable area of 18,000 square meters on 3 floors and 490 parking spaces

outdoors and indoors<sup>2</sup>. Comparably to the Dubeň shopping center it is serviced by a single road previously designed to meet traffic requirements of the housing area but unlike Dubeň it was not built on a green field as other retailers had already settled in this area (Metro). Apart from shopping centers, Žilina also houses a number of supermarkets and hypermarkets like Tesco, Baumax, Lidl, Billa, etc.



*Fig.1: Map of Žilina with shopping centers (yellow) and the area of the city center (in the red circle).*

Two most recent and largest additions to Žilina's collection of shopping centers were built in 2010, both inducing public protests and controversy. Shopping center Aupark opened Oct.21, 2010 after it won a law suit with the city of Žilina pertaining to town plan regulations. It is located in the city center where it replaced the largest public square in the city and offers around 26,000 square meters of gross leasable area on 3 floors and over 850 indoor parking spaces<sup>3</sup>. Mirage shopping center was opened on Nov.15, 2010 with over 21,000 m<sup>2</sup> gross leasable area on 7 floors<sup>4</sup> and 388 indoor parking spaces<sup>5</sup>. It is situated in the historical city center on a site previously occupied by smaller mixed-use development torn down with strong public disapproval and was erected over a public parking house built by the city.

In the process of preparation and currently on hold is another shopping center Štadión close to the city center in Žilina making use of its pedestrian zone that should combine sports venue, specifically football and ice-hockey, with retail, entertainment and offices. This project should bring more than 66,000 square meters of gross leasable area and 1,750 parking spaces.

### 3 Influences on the Commercial Real Estate Value

Although the generally accepted opinion that shopping center development has prevalently positive influence on surrounding areas and society providing higher tax revenues, employment, regeneration, and key infrastructure<sup>6</sup> is partly applicable in the situation of Žilina, it could be argued that the latest shopping centers built in the city center, Aupark and Mirage, yielded some more or less expected negative impacts as well. Most significant aspects of these developments with an influence on the commercial real estate value in their immediate vicinity lie in the

<sup>1</sup> Lambert, J.: *One Step Closer to a Pan-European Shopping Center Standard* [online] Research Review, Vol. 13, No. 2. New York: International Council of Shopping Centers, 2006. p.35-40. retrieved 2012-11-23 from [www.icsc.org/srch/lib/euro\\_standard\\_only.pdf](http://www.icsc.org/srch/lib/euro_standard_only.pdf).

<sup>2</sup> Max Servis, s.r.o.: *Presentation of the Max network* [online], retrieved 2012-11-20 from [www.maxservis.sk/max/5.Prezentacia\\_siete](http://www.maxservis.sk/max/5.Prezentacia_siete).

<sup>3</sup> Aupark: *About Aupark* [online], retrieved 2012-11-20 from [zilina.aupark.sk/page/sk/Informacie/O-AUPARKU.html](http://zilina.aupark.sk/page/sk/Informacie/O-AUPARKU.html).

<sup>4</sup> Bielik, T., Štansky, P.: *Mirage* [online] Žilina: Mirage Shopping Center, a.s., 2010, 120 p. retrieved 2012-11-20 from [www.mirageshopping.sk/info/zobrazo-obchodnom-centre-mirage/](http://www.mirageshopping.sk/info/zobrazo-obchodnom-centre-mirage/).

<sup>5</sup> Žilinská parkovacia spoločnosť. (2012). *Parking house* [online], retrieved 2012-11-23 from [www.zilinskaparkovacia.sk](http://www.zilinskaparkovacia.sk).

<sup>6</sup> International Council of Shopping Centers: *ICSC and its Work in the EU* [online], retrieved 2012-11-23 from [www.icsc.org/government/europe\\_work.php](http://www.icsc.org/government/europe_work.php).

major increase of leasable retail and office area, the availability of free parking in city center, longer opening hours rendering the city center more attractive and changes in the day light conditions in surrounding indoor spaces with impact on their function.



Fig.2: Map of Žilina city center with shopping centers Aupark and Mirage and Národná street.

### 3.1 Increase of gross leasable area

Probably the most significant influence of the shopping centers built in the Žilina city center is the overall increase of gross leasable area with impact on average rental prices reaching most areas in the city. However, the effect of this influence is most present in the structure of commercial real estate value in the city center, where Aupark's and Mirage's combined added over 47,000 square meters to gross leasable area in this location representing a sudden major increase compared to previously available area in the main shopping street Národná with approximately 14,000 square meters (Fig.2). As this growth in supply was not exactly matched by demand, the average asking prices for retail and office spaces in the city center dropped. This is illustrated in the graphs in Fig.3 and Fig.4 where average rental asking prices for commercial spaces in Žilina city center are shown excluding the commercial spaces within shopping centers Aupark and Mirage<sup>7</sup> (notice: asking prices are significantly higher in the mentioned malls).

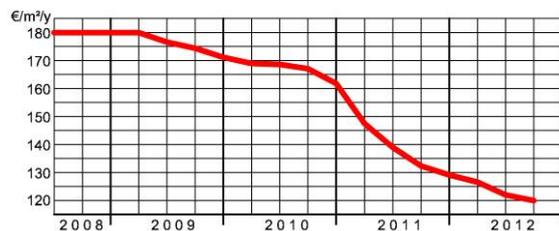


Fig.3: Graph of rental asking prices development for retail spaces in Eur/m<sup>2</sup>/year in Žilina city center.

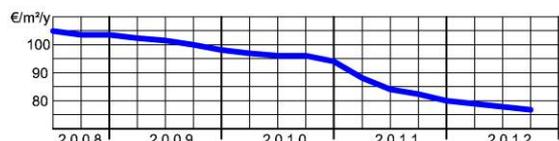


Fig.4: Graph of rental asking prices development for office spaces in Eur/m<sup>2</sup>/year in Žilina city center.

The influence of the ongoing global economic crisis on the commercial real estate value can only be analogically deduced from the data available for residential property since reliable information on commercial property is currently nonexistent in Slovakia<sup>8</sup>. The data processed by the National Bank of Slovakia showing the development of prices of residential real estate represented in the graph in Fig.5 indicate that the major decrease in real estate prices occurred in the years 2008 and 2009 with price changes comparably smaller afterwards. Consequently an assumption can be made that a similar scenario occurred in commercial real estate implying that the drop in average asking rental prices for retail and office spaces in Žilina was caused by the opening of the two shopping centers in October and November 2010.

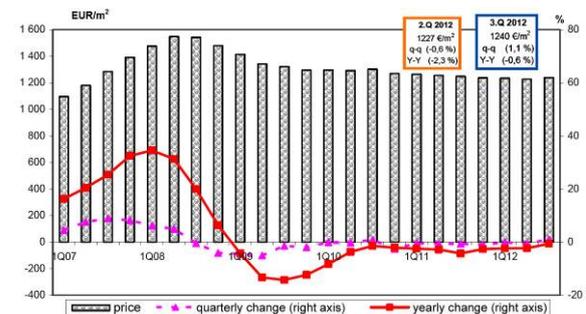


Fig.5: Graph of the development of residential real estate prices in Slovakia<sup>9</sup>.

Prior to existence of these shopping centers, the city's most attractive retail and office spaces were situated on a set of main pedestrian streets and squares. This natural pedestrian flow used to start at the railway station, continuing through city's pedestrian zone consisting of the principal shopping street Národná and interlinked squares Andreja Hlinku, Mariánske and Ludovíta Štúra, with the last-named being no longer in existence as the site was built up by Aupark.

Apart from adding new brand stores, the two developments drew in most of the existing ones previously located on the parts of the streets and squares not on the passageway connecting Aupark and Mirage. This happened mostly because the shopping centers advertise a more comfortable shopping experience independent of time and weather, with on site parking and a high concentration of shops, restaurants and entertainment facilities. As a result a change of the consumers' behavior took place, mainly in movement patterns, which now concentrate in the shopping centers themselves or between them. This affected the prices of commercial rental spaces on the pedestrian zone outside the shopping centers. Národná presently houses stores with products financially accessible to less economically powerful consumers consisting mostly of daily commuters migrating to and from railway and bus stations which reflects the decrease of asking prices for retail spaces in this area previously unavailable for these types of stores. Similar situation occurred in other parts of the city center not located directly in the current major pedestrian circulation area. By contrast, asking prices for commercial spaces increased in real estate situated in the pedestrian movement areas around the two shopping centers, even encouraging new rental spaces to be built there.

Although this change could be perceived partly positively, especially by the owners of the premium properties, the overall effect of the increase of the gross leasable area in the Žilina historical city center resulted in a drop of average asking prices for commercial rental spaces outside the shopping centers. This transformation has been also reflected in longer advertising

<sup>7</sup> Realitné centrum RED: *Index RED 100/50* [online], Žilina: Realitné centrum RED, 2011, 2p. retrieved 2012-11-10 from [www.red.sk/vztahy/red-index](http://www.red.sk/vztahy/red-index).

<sup>8</sup> Čár, M.: *Current situation at the commercial real estate market*. In Biatec, ISSN 1335-0900, 2011, vol.17, no.7, p.8-14.

<sup>9</sup> Department of macroeconomic analyses of Currency policies section of National Bank of Slovakia: *Development of residential property prices in Slovakia in 3Q/2012* [online], retrieved 2012-11-20 from [www.nbs.sk/\\_img/Documents/\\_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN\\_3Q2012.pdf](http://www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN_3Q2012.pdf).

periods when renting a property and a higher number of unoccupied commercial spaces not only in the city center but also in other parts of the city (i.e. shopping center Max).

### 3.2 Supply of free parking spaces

Parking availability and accessibility for customers and employees is among crucial factors influencing the value of commercial real estate. In Žilina on-street parking is in operation with fees varying from 0,80 to 2,00 Euro per hour in the center and due to a growth in the automobile usage, parking has become particularly difficult recently. As a result commercial properties without the possibility of restricted free parking in the city center lost some of their appeal to automobilized part of population who in turn preferred shops and offices with free or less expensive parking outside the city center.

Through the development of Aupark the city center of Žilina acquired 850 unpaid parking spaces located on its premises plus the 388 spaces in the park house below Mirage became free of charge too. This had a positive influence on commercial real estate value in the city center making it available to a larger spectrum of consumers. In fact the radius of this benefit stretches quite far beyond the city center, especially for those using it for longer time periods, such as owners or employees of local businesses and institutions mostly during winter. The parking spaces within the shopping centers are not reserved only for their visitors, but are available for public without restrictions and time limitations between the hours of 8,00 and 21,00.

However, based on the experience from different cities in Slovakia with shopping centers located in the center (i.e. Trenčín), it is highly probable that the possibility of free parking in Aupark and Mirage will be restricted in the future. This particular issue is nevertheless very sensitive for the shopping centers and the changes of their strategy will depend on the parking capacity usage and availability primarily for their customers. The situation is far better in the case of Aupark because the ratio of gross leasable area to the number of parking spaces is more favorable. The parking house used by Mirage's customers not only has a much weaker ratio but the layout of parking spaces meets merely the minimal requirements of the standards resulting in less comfortable parking. With the possible introduction of time restrictions of free parking on the side of the shopping centers limiting the stay to 1 or 2 hours, the positive influence of the free parking availability on the real estate value in the neighborhood will be modified depending on the rates compared to Žilina's on-street parking and the fact that consumers will most probably use this time period to shop only within the shopping centers without visiting other stores outside. If in effect, this new parking regulations would prevent long period stays hence reducing the radius of its positive influence outside the city center.

### 3.3 Change in opening hours

Before the operation of the two shopping centers in Žilina city center, the opening hours of majority of the stores located in this area were from 9,00 to 18,00 Monday to Friday and from 9,00 to 12,00 on Saturday, staying closed on Sundays, with the exception of Tesco. The city center appeared vacant during most of the weekend with a negative influence on restaurants and cafes located there.

The shopping centers stay open all week including bank holidays from 9,00 to 21,00 having positive influence on the operation of the eating-out facilities located in the historical city center that profit from a higher circulation of consumers during the weekends. The new opening hours created a lively environment, however, as already described the location of the beneficiaries of this positive effect is restricted to the zone of the highest pedestrian movement. The two shopping centers in this case substitute the role of public institutions that should take the lead role in creating attractive and vibrant public open spaces through incorporation of cultural, educational and sports events.

### 3.4 Changes in day light conditions in the surrounding indoor spaces

Perhaps not so obvious on the larger scale of real estate affected by the shopping centers, the aspect of changes in day light conditions in the surrounding existing indoor spaces is nonetheless significant in properties directly surrounding them. Requirements for hygienic conditions related to sun light and day light in existing indoor spaces with a permanent presence of people, e.g. apartments, offices, stores, etc. are set in the valid legislation, specifically the Slovak National Standard (STN) 73 0580-1 Z2: 10/2000. Parameters examined include the equivalent angle of outdoor shadowing that represents minimal required values of day light penetrating into the analyzed spaces and on unbuilt sites independently of insolation. The highest permitted angle in Žilina is 30 degrees without differentiation and should be guarded by county council's building department during planning permission process.

The development of Aupark and especially Mirage in historical center with dense built environment led to noticeable worsening of day light conditions in the surrounding buildings facing the shopping centers northern and western facade. Most affected are existing indoor spaces located on the ground floor where the minimal hygienic requirements cannot be met and thus if the equivalent angle of shadowing is higher than 30 degrees no longer qualify as offices or stores. It could be speculated why this particular aspect was not examined in detail by the authorities during the planning process; however the resulting decrease in the value of real estate housing the affected spaces is apparent.

### 4 Conclusion

The two shopping centers located in Žilina's city center had a strong impact on the value of commercial real estate in the surrounding neighborhood, with the most influential aspect being the increase of gross leasable area. Although the availability of free parking and longer opening hours rendered the city center more attractive to most consumers, this positive effect was outweighed by the unbalanced ratio of supply and demand of commercial rental spaces leading to a drop in asking prices for commercial real estate. The real estate market is constantly influenced by a large number of factors, one of them presently being the effect of the global economic crisis responsible for the decrease in real estate value in 2008 and 2009. However, the drop in commercial real estate value in Žilina city center was clearly caused by the new competitive environment created by the two shopping centers.

Aupark and Mirage might have drawn more people to the city but the beneficiaries of this situation are restricted to the pedestrian passageway between the malls. The two shopping centers used rather one-sidedly the favorable urban layout of Žilina's city center building on its historic tradition of pedestrian movement from Národná to Antona Bernoláka streets. That is also where most of the premium stores used to be located but now with the shift in the consumer behavior the commercial real estate value is higher elsewhere. Further analysis of possible town planning regulations in view of the sudden major increase of gross leasable area in city centers could be undertaken in the future so that large private estates' influence on the existing structure of urban fabric is more positive without preventing quality public open spaces from existence.

### Literature:

1. Aupark: *About Aupark* [online], retrieved 2012-11-20 from [zilina.aupark.sk/page/sk/Informacie/O-AUPARKU](http://zilina.aupark.sk/page/sk/Informacie/O-AUPARKU).
2. Bielik, T., Štansky, P.: *Mirage* [online] Žilina: Mirage Shopping Center, a.s., 2010, 120 p. retrieved 2012-11-20 from [www.mirageshopping.sk/info/zobraz/o-obchodnom-centre-mirage/](http://www.mirageshopping.sk/info/zobraz/o-obchodnom-centre-mirage/)
3. Cár, M.: *Current situation at the commercial real estate market*. In Biatec, ISSN 1335-0900, 2011, vol.17, no.7, p.8-14

4. International Council of Shopping Centers: *ICSC and its Work in the EU* [online], retrieved 2012-11-23 from [www.icsc.org/government/europe\\_work.php](http://www.icsc.org/government/europe_work.php)
5. Lambert, J.: *One Step Closer to a Pan-European Shopping Center Standard* [online] Research Review, Vol. 13, No. 2. New York: International Council of Shopping Centers, 2006. p.35-40. retrieved 2012-11-23 from [www.icsc.org/srch/lib/euro\\_standard\\_only.pdf](http://www.icsc.org/srch/lib/euro_standard_only.pdf)
6. Max Servis, s.r.o.: *Presentation of the Max network* [online], retrieved 2012-11-20 from [www.maxservis.sk/max/5.Prezentacia\\_siete](http://www.maxservis.sk/max/5.Prezentacia_siete)
7. Department of macroeconomic analyses of Currency politics section of National Bank of Slovakia: *Development of residential property prices in Slovakia in 3Q/2012* [online], retrieved 2012-11-20 from [www.nbs.sk/\\_img/Documents/\\_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN\\_3Q2012.pdf](http://www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN_3Q2012.pdf)
8. Realitné centrum RED: *Index RED 100/50* [online], Žilina: Realitné centrum RED, 2011, 2p. retrieved 2012-11-10 from [www.red.sk/vztahy/red-index](http://www.red.sk/vztahy/red-index)
9. *Slovak National Standard STN 73 0580-1 Change 2: 10/2000, Daylighting in buildings, Part 1: Basic requirements*
10. Žilinská parkovacia spoločnosť. (2012). *Parking house* [online], retrieved 2012-11-23 from [www.zilinska-parkovacia.sk](http://www.zilinska-parkovacia.sk).

**Primary Paper Section:** A

**Secondary Paper Section:** AH, AL, JN