

SWOT ANALYSIS IN THE JOB OF A REAL ESTATE APPRAISER

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Abstract

Based on many years of research, the authors present SWOT analysis as a tool for analysing the real estate market. It is usually assumed that such analysis is performed prior to the investment and it is a serious and decisive factor in the process of investment implementation. In the first part of the paper the authors present the environment of the real estate market in the context of the construction of Galeria Piekarska shopping centre in Jarosław, which is a town with a population of 38,000 located in Podkarpackie Province. Having analysed available data, especially the real estate market environment in 2018, it seems unreasonable for such a project to be commenced. It is clear from all available data that the construction of a 28,000 square metre shopping centre is subject to high economic risk. It is highly probable that the assumed payback period will be extended several times. We tried to find a logical explanation for undertaking an investment with such a high level of risk. The implementation of SWOT analysis for 2005 and 2018 made it possible to solve a seemingly difficult puzzle.

Keywords: real estate market analysis, time series, SWOT analysis

Introduction – The analysis of basic indicators of commercial real estate market

Each good has its level of market saturation. For commercial areas, it is assumed that for a town with a population of 28,000 and its neighbouring area, the total retail space should not exceed 50,000 square metres (BYDŁOSZ, 2010).

Table 1. Selected indicators of commercial real estate market for the town of Jarosław in the years 2000-2014.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Retail space (in thousand square metres)	27,8	28,8	32,0	32,0	34,6	34,6	35,2	35,6	37,0	37,4	38,7	41,3	51,7	54,7	59,0
Number of potential buyers (in thousand)	60,0	58,2	57,6	57,0	56,5	55,9	55,3	54,8	54,2	53,7	53,2	52,6	52,1	51,6	51,1
Retail space (in square metres per one buyer)	0,5	0,5	0,6	0,6	0,6	0,6	0,6	0,7	0,7	0,7	0,7	0,8	1,0	1,1	1,1

Source: Own elaboration.

In the years 2000-2014, based on the indicators presented in Table 1, it can be stated that in Jarosław:

1. Total retail space in 2000-2014 increased more than double in relation to potential buyers.
2. In the period in question, the number of potential buyers decreased by nearly 15% and the number of inhabitants of Jarosław decreased by 26% (from 38,000 to 28,000 inhabitants).

During the analysed period, in cities such as Warsaw, Poznań and Cracow, the retail area per one inhabitant ranged from 0.7 to 1.1 square metres, which in comparison with the retail area of 2.1 square metres per one inhabitant in Jarosław is astonishing. According to the Polish Merchant Congregation, one

400-600 square metre chain store can satisfy the needs of 5-8 thousand inhabitants, which means that 5 to 8 chain stores in Jarosław would be enough. After the inventory, 41 chain stores were found present in the town, which constitutes about 10% of all stores (PARZYCH, 2013).

According to standards developed for architects, to meet the needs of the population in Poland, for design purposes it is enough to assume 0.7 square metre of retail space per one inhabitant. EU standards for the richest countries assume 1-2 square metres of retail space per one inhabitant. While comparing the average salary in the European Union, it should be noted that it is characterised by really high variation (MAKOWSKI, 2003; NET-2). The average monthly salary of Europeans in 2013 ranged from EUR 409 in Bulgaria to EUR 4 663 in Luxembourg (NET-1). In addition to the Luxemburgers, also Danes and the Irish received high average monthly salary. In 2013 they earned an average of EUR 4 561 and EUR 3 949, respectively. On the other hand, in the same year Poles received an average monthly gross salary of EUR 865 (NET-1). If we compare the average salary in Poland and rich EU countries, the assumed relations of retail space per one inhabitant amounting to 0.7 square metre for Poland and 2 square metres for rich EU countries seem fully justified (DĄBROWSKI, 2013).

Based on survey research, it can also be stated that the year of 2000 was a merchant's market and the year of 2014 was a buyer's market. In order to confirm this thesis, a detailed inventory of retail sales centres was carried out and it turned out that in 2014 there was one store in Jarosław per 95 inhabitants, while at the same time in Warsaw Śródmieście there was one store per 635 inhabitants. The choice of Warsaw for the comparison was non-accidental, because exactly the opposite proportions should be expected, due to the advantage of purchasing power the inhabitants of the Polish capital have over the residents of the district of Jarosław. Nearly 400 stores were inventoried in Jarosław, which constitutes an unbelievable number for 38,000 inhabitants (according to the Central Statistical Office and 28,000 according to household waste declarations). In practice, this means that there is one store for each small block of flats. Such a strong fragmentation in trade resulted in its total helplessness in the confrontation with retail chains. It may be the reason why chain stores decided to expand so much into the local market. The large number of shops and their total area has brought about a significant decrease in lease prices in recent years.

Table 2. Average lease prices of retail facilities located in the centre of Jarosław in the years 2000-2014.

Price level \ year	2000 - 2005	2006 - 2011	2012 - 2016
2nd floor	25 - 15 PLN/m ²	25 - 10 PLN/m ² the area of vacant buildings at the level of 10-30 %	20 - 5 PLN/m ² large area of vacant buildings at the level higher than 30%
1st floor	40 - 20 PLN/m ²	35 - 15 PLN/m ²	30 - 10 PLN/m ² area of vacant buildings at the level of 30%
ground floor	140 - 70 PLN/m ²	120 - 60 PLN/m ²	100 - 30 PLN/m ²
estimated payback period	5-8 years	7-10 years	8-20 years

Source: Own elaboration.

The decline in lease prices of retail space and the mass emergence of vacant buildings on the first and second floor, along with the increase in payback period, confirm the saturation of the market with retail space. Investments in retail space that will pay back after 15 years may turn out to be thoroughly unprofitable in the light of the current global trade development.

E-commerce market

Online sales are dynamically developing in Poland, which may lead to significant reductions in retail space and increase in the number of vacant buildings. According to eMarketer's estimates (B2C E-commerce Sales Worldwide 2012-2017), the global value of online shopping all over the world in 2015 exceeded \$ 1.5 trillion. It is estimated that in the near future the turnover will reach nearly \$ 2.5 trillion. In Poland, for several years, most companies have recorded an increase in e-sales or have kept it at a similar level.

Specialists claim that nearly 50% of shopping needs in the near future can be fulfilled via the Internet. For a dozen years or so an extremely intense development of e-shops in Poland has been observed. Over the last dozen years, the e-commerce market has seen a very dynamic development; according to Forbes (NET-2) every year the number of online shops increases. The dynamics of e-commerce development in Poland can be best described by its growth from less than a thousand to nearly twenty thousand online shops in 2018.

Experts estimate that currently about 5% of purchases in Poland are made via the Internet, and in the rich EU countries it is about 10%. In the USA, in some niche market segments, online sales reach up to 60% of total turnover.

Demography

Another determinant affecting the real estate market is demography. Fig. 1 shows demographic changes in the years 2002 - 2014 in different age groups.

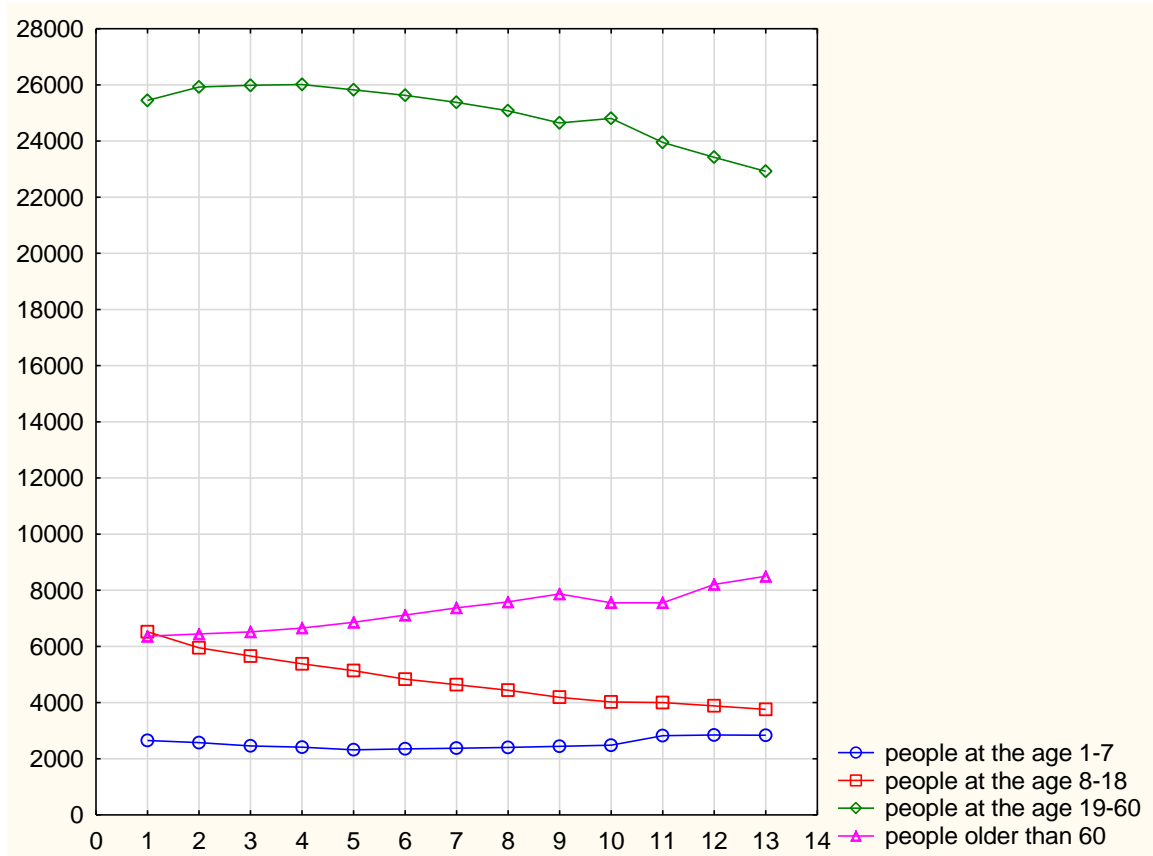


Fig. 1. Demography in Jarosław in the years 2002-2014 in age groups.
Source: Own elaboration based on the data from UM in Jarosław.

In the years 2002-2014 what was observed was:

1. 7 % increase in the number of inhabitants in the age group 1-7
2. 42 % - significant decrease in the number of inhabitants in the age group 8-18
3. 10% decrease in the number of inhabitants at their working age (19-60)
4. 33% increase in the number of people at the post -productive age.

The increase in the number of people who are over 60 by 2137 inhabitants, and the simultaneous decrease in the number of inhabitants within the range 8 to 60 years old by 5281 people, in practice means a fall in turnover at the level of 10-15%.

Based on the data obtained from the Tax Office in Jarosław, it was observed that the tax base for VAT tax in 2010-2015 remained practically unchanged and it amounted to PLN 2.33 billion in 2010 and PLN 2.32 billion in 2015 respectively. It can therefore be concluded with a high probability that the turnover in retail trade has been the same for several years only nominally. If inflation and the increase in the average and minimum wages in recent years are taken into account, maintaining a tax base at a similar level means actual fall in trade turnover and much lower profitability.

Presuming that the expenses of the inhabitants of Jarosław depend on their age, the table below presents expenditure in conversion units. Based on research survey, it was assumed that a person within the range 19 to 60 years old spends 1 unit, while a person at the age above 60 years, 0.6 units. A person aged 1-7 years has the smallest needs (spends 0.5 unit) and a person aged 8 to 18 much larger needs i.e. spends 0.8 unit.

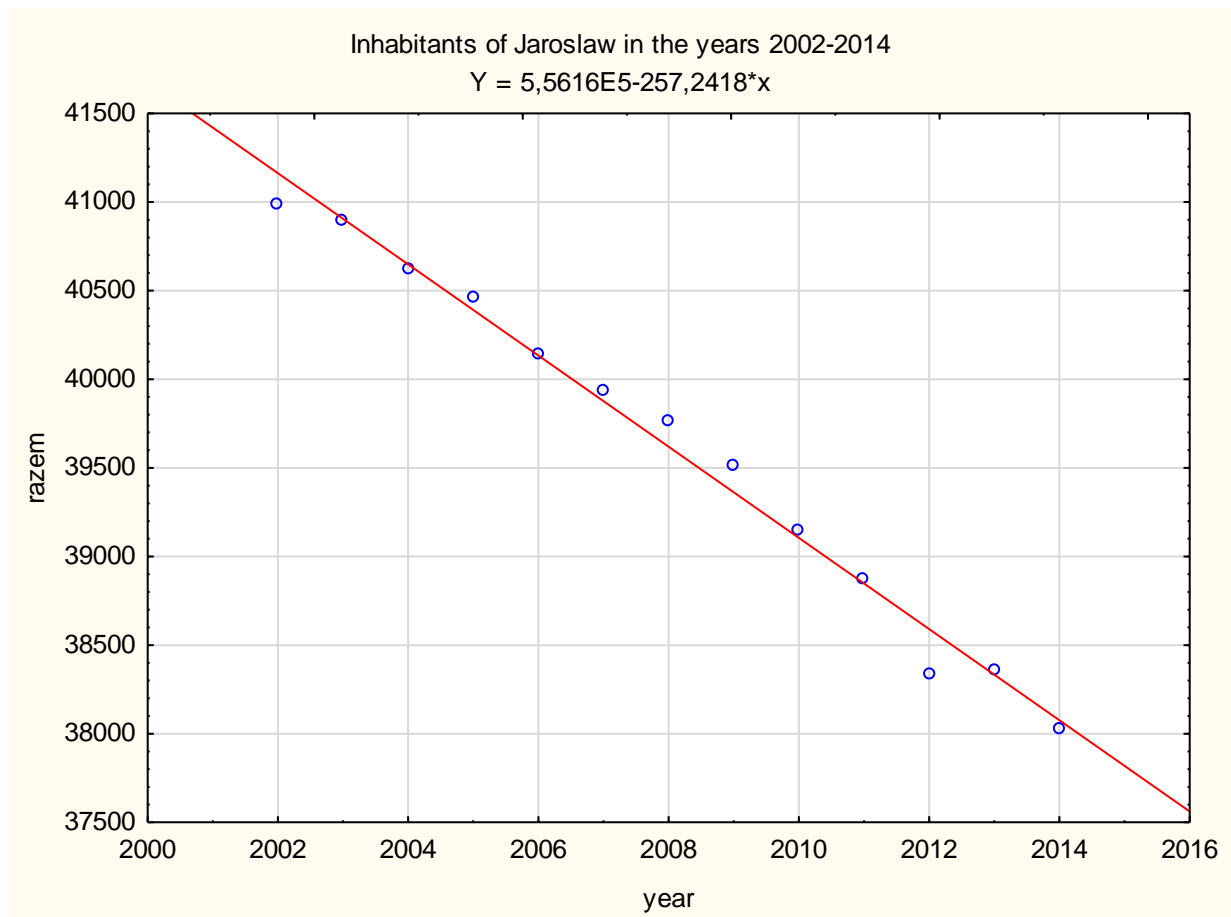


Fig.2 . Inhabitants of Jarosław in the years 2002-2014.
Source: own elaboration based of the data from UM in Jarosław.

Table 3. Conversion factors for the purchasing power of the age groups.

Year\Age groups	People at the age 1-7	People at the age 8-18	People at the age 19-60	People older than 60
Expenditure in units	0,5	0,8	1	0,6

Source: Own elaboration.

Based on the above assumptions it was possible to calculate the decrease in the purchasing power of inhabitants due to ageing in the years 2002-2014. The decrease amounted to 9.4%. Having compared the data from the Tax Office, i.e. the tax base plus Vat, similar results were obtained, which confirms the above assumptions. With probability approximating 97%, it can be concluded that in the next years the purchasing power of consumers living in Jarosław will decline by about 0.8% per annum. If we take into account the strong increase in online sales as well, it is likely that the decline in traditional shops will be at the level of 1-1.5% per annum, at least for a few years.

Development of retail chains in Poland

In Poland, there are several dozen large retail chains on the market and there are around several thousand global brands (ŚLIWIŃSKI, 2015). Foreign companies have very different strategies for the development of their commercial activity in Poland. Among foreign companies, two models of investment approach can be distinguished. Some companies invest in real estate while other prefer leasing. Currently, it seems that the concept of leasing retail space definitely has more supporters due to the reduction of investment risk. In the case of a drop in turnover or the emergence of strong competition, the lessee can always terminate the lease. In Jarosław, over 90% of retail companies lease retail space. In the face of demographic decline, economic immigration of young people and the development of e-commerce, leasing retail space carries a significantly lower investment risk.

Summary of preliminary research

In the vicinity of Jarosław practically in every small town or village, shops being part of retail chains were opened, often two or more. In the Podkarpatie and other voivodships, one can observe the duplication of the network development scheme. At the time when research was conducted, on the basis of the information obtained from local authorities it was confirmed that 28,000-square metre Galeria Piekarska shopping centre is in the final phase of the construction process, and at the same time efforts are being made to build more supermarkets with a total area significantly exceeding 30,000 square metres.

Summarising the results of the research one can conclude that:

1. In the upcoming years local traders will play a niche role with a declining tendency (VITALI, 2015).
2. The retail trade will be dominated by chain stores and supermarkets.
3. Surplus retail space will cause a drastic drop in lease prices
4. Vacant buildings will become a widespread phenomenon, which will lead to a significant deterioration of the image of our town.
5. The number of new investments will drop significantly due to longer payback period.
6. The number of potential buyers will approximate the number of inhabitants as a result of opening of new shops in the neighbouring towns.
7. The ageing of society accompanied by the outflow of young people to look for jobs will cause a systematic decline in the purchasing power of buyers.
8. The negative tendencies in trade will be exacerbated by the development of online shops.
9. As a result of shutting down of small local shops, the number of shops will be proportionally reduced by way of agreement between retail chains in order to optimise the profit.

According to the authors, seemingly illogical investments in new retail space may be caused by:

1. The inflow of speculative capital.
2. The unmitigated policy of retail chains, which in the future will lead to overtaking some retail spaces for a fraction of their replacement value or to a drastic drop in lease prices.
3. Making use of 2005 SWOT analysis and no further correction of this analysis in the face of changing reality.

SWOT analysis for Galeria Piekarska in Jarosław for 2005 and 2018

Table 4. SWOT analysis for Galeria Piekarska in Jarosław for 2005 and 2018.

STRENGTHS		WEAKNESSES	
2005		2005	
<ul style="list-style-type: none"> • lack of competition and great supply of retail space, • chance for high lease prices in the town centre (more than PLN 100 /square metre), • high dynamics of the development of the company, • experience in building shopping centres, • the company's flexibility, • scarce investment risk for the company, • good relations with local authorities, • consumers' expectations for a supermarket, • great location in the town centre, • the proximity of the train and bus stations (300m), • extended families, • long tradition in business activity of inhabitants of Jarosław (potential lease holders), • good location near the border, • ease of crossing border by our eastern neighbours, • great sense of safety, • strong development of the local school of higher education (in 2004 it had 10,500 students in a town with 38,000 inhabitants) • almost no vacant buildings, • payback period at the level of 3-5 years. 	<ul style="list-style-type: none"> • dependence of the investment on the consent of the conservation officer to cut down 120 trees and demolish two listed buildings, • lack of ring road (traffic going through the town centre), • poor traffic conditions in the area surrounding the shopping centre, • growing labour migration especially of young people (potential employees). 		
2018		2018	
<ul style="list-style-type: none"> • social expectations, • -flexibility of the company, • -consumers' expectations for a supermarket, • perfect location in the town centre, • the proximity of the train and bus stations (300m), • location near the border, • - big indoor car park (the 900-space parking lot). 	<ul style="list-style-type: none"> • very poor traffic conditions, • increase in the number of cars, • a significantly longer payback period (more than 15 years), • the danger that the parking space of the shopping centre might turn into a town car park, • difficulty in financing the investment, • a 10-year delay of the investment. 		

OPPORTUNITIES	THREATS
2005	2005
<ul style="list-style-type: none"> • expansion of chain stores which are eager to lease attractive retail space in Jarosław, • lack of unity and possibility to set up a big competitive company by local entrepreneurs, • lack of modern methods of management among competition, • making use of experience gained in other countries, • opportunity to acquire funding from external sources (UE), • opportunity to gain European funding, • growing purchasing potential, • no chain stores in neighbouring towns, • great commercial profitability, • low social mobility. 	<ul style="list-style-type: none"> • first symptoms of migration of the young generation, • first online shops, • first symptoms of demographic decline, • the need for conservation officer's consent to cut down 120 trees and demolish two listed buildings.
2018	2018
<ul style="list-style-type: none"> • family friendly policy (child-support benefit 500+), • slow re-emigration, • strong interest in leasing retail space on the part of chain stores. 	<ul style="list-style-type: none"> • a drop in the number of students to 3,000, • ageing of the population, • decrease of purchasing potential (outflow of 10,000 inhabitants), • the arrival of chain stores in the neighbouring towns, • excess supply of retail space in Jarosław, • very strong competition on the real estate market, • a large number of vacant buildings (up to 30%), • a drop in lease prices to the level of 30% when compared to the prices in 2005, • lengthening of payback period (due to competition on the market) from 3-5 years to 15-20 years, • terminating the lease agreements by 'chain store lessees', • high risk of ceasing co-financing by national banks, • high risk of global banking crisis, • high risk of crisis in the commercial property market, • growth of terrorist threat in Europe, • reducing European funding for commerce, • decrease in commercial potential of local tradesmen-potential lessees, • a drop in commercial viability, • disruptions in traffic on the Polish-Ukrainian border, • high social mobility (cars), • the development of e-commerce, • Sunday trade ban.

Source: Own elaboration.

Summary

Conducting a SWOT analysis for Galeria Piekarska shopping centre project in Jarosław for 2005 and 2018 enabled us to reveal that most probably the investor has not monitored the surrounding reality and has not adjusted the scale of the building project to the dynamically changing needs and capability of the local community. According to the authors, it is the most plausible explanation for completing this outsized project.

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