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Development Path And The Role Of Industrial Parks – The Case Of Győr

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Abstract: The authors introduce Győr as a significant member and central city of the Central European automotive industrial concentration. As a traditional industrial town, and due to its great geographic location, it is one of the leading cities in the automotive industry, both on national and on international level. The pulling power is the Audi's Hungarian site situated in the town but also related industries and suppliers play relevant role in the development of the industry and thus, the whole economy. The industrial park of the city supports the settled companies with special infrastructure and services and offers home to most of the suppliers. The study gives a brief overview of the city and its economy then it will be continued by an empirical research and its significant findings. The quantitative research focuses on the reputation of industrial parks generally, and of the industrial park of Győr specifically.

Keywords: *industrial park, reputation, economic development, empirical research.*

Introduction

Although in our days services have priority, we shall not forget the importance of the industrial activities and the role played by them in the Hungarian national economy. In our study, we lay emphasis on the conjugation of theory and practice, introducing the category of industrial parks within industrial areas, and their role in the economic development, expanded with one concrete case.

In the economy of Győr, automotive industry is the key sector, but this paper doesn't focus on the role played by the leading MNE (Audi) within the city's economy, but rather on the industrial park serving its needs. On one hand, the study settles the International Industrial Park of Győr on the map of Hungarian industrial parks, and touches its function within the city's economy; on the other hand it reveals the opinions and reputation of the park with the help of a primary research.

Literature Review

The city's economy

The city of Győr is a city with county rights and the head of Győr-Moson-Sopron County, and has a very favourable geographical location, as it is located in the centre of the triangle of three capitals – Vienna, Budapest and Bratislava. The city is plugged into the Central-Eastern European blood-stream by its well established infrastructural network, which was irremissibly to achieve in order to become a determinate actor in the region (Rechnitzer, 2014).

This outstanding role is bound to the vehicle production in first row, which always has been an important factor in the economy and industry of the city. It has been a well developed industrial pole even before the transition period, which was able to give quick and appropriate answers on the changes arisen in the 1990s. Due to the economic structural changes, some of the conventional industries (e.g. the textile industry) have fallen back (or even became obsolete), but in the meantime vehicle production became the leading branch, which enabled that the city of Győr got spotted on the map of the Central and Eastern European concentration of vehicle production, as one of the determinant actors (Győr Megyei Jogú Város Önkormányzata, 2014). This all is proven by statistical data, as the city of Győr is the primary target destination of FDI, where the export value exceeds 60% (64.3% in 2009), which is much higher than the average national rate of 33.3% (Rechnitzer et al., 2014). Taken the cities with county rights into consideration, Győr has the most companies with foreign interest – close to 400 companies have settled in the city (KSH, 2012a). Its economical potential is strong (rate 53 in 2005), while its unemployment rate is low (2.69% in 2011), especially if we compare this rate to the national average, which has been 5.46% in 2011 (Rechnitzer et al., 2014).

The role of vehicle industry and Audi Hungaria Motor Ltd. in the economy of the city

As a traditional industrial city, the economy of the city has been always affected by the automotive sector. Vehicle production has always received special attention among the industrial branches, as the city houses a company with one of the oldest history, the Rába Automotive Holding Plc. (http://www.raba.hu/english/our_history.html, 2015.05.15). The company has meant an important base from the perspective of skilled labour and infrastructure, thus the automotive industry and related industrial sectors have appeared, got stronger and became dominant sectors by today.

In our days, the Audi Hungaria Motor Ltd. (further referred to as Audi) can be considered as the elemental automotive - and in general the leading - company of the city, which after its settlement in 1993 has become the biggest exporter and most capital intensive company of Hungary (Czakó, 2014). /In this study we do not intend to describe the German MNE in detail, we only report the relevant data related to the topic/.

The company's presence in Győr has an effect on both the economy and the society of the city, the latter also shows itself in the employment (more than 11k employees in 2014) on the one hand, but due to its outstanding wage levels its effect of workforce-absorption is also significant (www.audi.hu, 2015).

Among the economic impacts we can mention the build-up of the supplier network, in which the ratio of Hungarian suppliers is only 4%, whereas the German suppliers settled in the city represent 58% (Czakó, 2014). „As a result of vehicle production starting off with remarkable foreign investments, large component producing companies have started their production also in West-Hungary one after another, which companies do not (or not only) deliver parts to the Hungarian automotive companies, but to their whole network” (KSH, 2012b).

The majority of these companies are hosted by the industrial park on the confines of the city, located next to Audi.

Industrial parks in Hungary

Although in well-developed Western European countries the development of industrial parks has started already in the 1960s (Benko, 1991), it has begun in the Central-Eastern European area – and so in Hungary – only after the democratic transition period, in the beginning of the 1990s (Kiss, 2013). The companies located close to each other did get economic advantage because of the positive economic externalities arisen from the geographical proximity, which played a role in it, that the settlement close to others has become conscious in the form of different industrial grounds. In Hungary, the first industrial parks came to life in the first half

of the 1990s, and their number soon has grown fast. Between 1997 and 2000 more than 100 industrial parks were established. These projects have been handled as a determinant milestone in the national economic and industrial development, and although the tempo of their establishment has dropped already by today, and although the emphasis has been rerouted on the qualitative development of the existing parks, they are still considered as a key actor of the Hungarian economy.

We face a disturbance in the terminology of the Hungarian industrial parks; therefore we state that in our study we only use those definitions, where their role in the economic development is highlighted. According to Tiner, industrial parks are “important tools of territorial development” (Tiner, 2011, p. 291) and their effect on the regional development is also determining.

Rakusz has dealt with the research of Hungarian industrial parks in the beginning of the 2000s, as a part of which he defines parks as such establishments, which implement innovation through involving inland and foreign capitals, privilege finished goods producers or supplier companies focusing on export, help to involve the inland human capital, and do foster to plug in the industrial and academic research centres (Rakusz, 2001, p. 22).

Ben and Wang state – mainly in relation to Chinese industrial parks – that their improvement is an important political tool, that is being used in many industrialized country, and that does not only create jobs, but also enhances the profitability of the cities and keeps up the competitiveness of the given country (Ben and Wang, 2011, p. 57), but this specification also correct in relation with Hungarian parks.

Industrial estates have already been standardized based on different aspects, out of which now the most relevant ones will be reviewed that apply in case of the Hungarian ones. Industrial parks can be classified on one hand based on the regions they are located at, the base of which classification is the competition strategy used in that particular region. This way we can segment three different types:

- the Neo-Fordist region (features: mass production, routine activities requiring few expertise, low level of innovation and networking, the main role is given to the low cost of resources),
- knowledge applying region (features: workforce with high level of expertise, high level of innovation and networking, capability of adopting novelties),
- knowledge creating region (features: strong integration between the companies, high level of value-added services and innovation) (Lux, 2013, pp. 7-8).

The majority of the Hungarian industrial estates can be classified as part of the Neo-Fordist industrial parks; we can find only a few examples of the knowledge applying ones, e.g. in the capital Budapest.

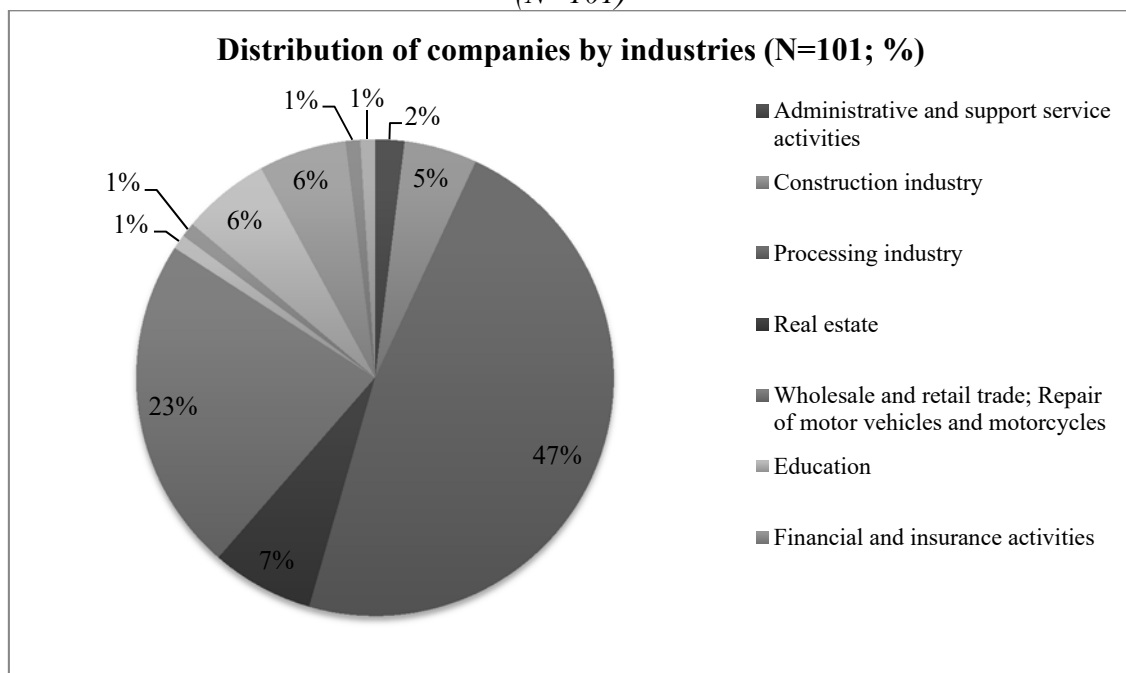
Due to the rising value of knowledge itself, the so called scientific and technological parks have appeared, for the definition of which in the Hungarian regulation a separate edict has been implemented. This governmental edict states, that this type covers those industrial parks, which have been established - or operate – in order to support the development of primary knowledge-intensive companies, and those dealing with technological innovation (23/2013 (II.1.) edict). In the international literature, the definition of scientific and technological parks gets separated. Scientific parks play an important role as transmitters between the establishments of higher education and companies, and the R&D is outstanding, whereas technological parks lay emphasis on production and host innovative companies (OECD, 2011). In Hungary, these two types are handled as one unit because they are also not separated in practice.

As introduced earlier, the appearance of industrial parks in Hungary has only started in the beginning of the 1990s, but after the transition period an explosion-like boom has been noticed in their number. The first Hungarian industrial park has been established in 1992 in Győr, as a totally green-field investment. The leaders of the local government already had their very own idea of how to build up the new industrial park, but finally the effectuation has come into existence as a collaboration between Hungary and Austria. The International Industrial Park of Győr Ltd. has been established on the 10th of July 1991, with a capital of 600 million Hungarian Forints, as a Hungarian-Austrian joint venture, with a Hungarian share of 40%. The Austrian party provided the financial fund, the Hungarian 36 acres of land and the infrastructure. By today, the company is owned completely by the local government. After the establishment, the first high priority mission of the company was to supply the site with public utilities. After the construction works have been finished, the industrial park has opened its gates in September 1992.

Despite the difficulties at the beginning, the last more than 20 years can be considered as a success story. The land situated “in the middle of nowhere” at the beginning slowly got populated by different companies, in which process the settlement of Audi in 1993 and the establishment of the Innonet Non-profit Ltd. both played a key role. The appearance of the German MNE culminated in the arrival of German suppliers, whereas the Innonet innovation and service centre helped the companies planning to settle with many services, and also other companies trying to get in touch with those already settled. The non-profit company functions as innovation centre and business incubator in the zone of the industrial park, its history up till today is merged with the history of the Park itself.

The range of the park itself has been expanded many times, and has a land of over 190 acres by now, and the number of companies settled is 104 (<http://www.ipgyor.hu/hu>, 2014), among which we find MNEs out of 13 countries, and Hungarian SMEs.

Figure 1: The distribution of settled companies in the Industrial Park according to industries (N=101)



Source: Own edited based on data (2012) made available by the International Industrial Park of Győr Ltd. (2015)

The number of people employed by the companies settled in the park exceeds 5100 (International Industrial Park of Győr Ltd., 2012), which is a great contribution to the city's employment rate. The economic effects of the industrial park have influenced different fields, as in the unfavourable economic periods it had an important role in the stirring up of the economy, it has enliven the construction industry, companies started to invest into manufacturing equipments, and new jobs were created while the number of supplier- and service orders have increased. This effect is still present in the life of the park and its companies, but also in the economy of the city (Magasházi, 1998).

Employing the standardization obtainable from the theoretic literature on the industrial park of Győr, we can classify it to the Neo-Fordist and partly to the knowledge applying regions and industrial areas, where the companies have specialized on routine activities, although the ratio of innovation-focused companies is growing. The industrial park nowadays has the characteristics of technological parks, and Innonet plays an important role as business incubator.

In the next chapter, we try to give an answer on how the inhabitants of Győr-Moson-Sopron County think about the industrial park itself, how is the reputation of the facility and that of the industrial parks in general among the respondents.

Methodology

In order to get data about the assessment of the industrial park in Győr, and the parks in general, we carried out a quantitative research. As part of this, with the help of a questionnaire we asked such people living in Győr-Moson-Sopron County, who did not deal with industrial parks in a scientific or professional manner, and were therefore able to answer the questions laically. The questionnaires have been processed manually, the data-coding, their cleaning and work up has been done with the help of the SPSS 20.0 statistical programme.

The final number of the sample has been 400 after cleaning all data, all of which was adequate to the first criteria of the research, the geographical impoundment. Out of the sampling techniques we have employed the quoting technique, the base of which – the quotes – were arising from the age groups (see Appendix 1).

Before the initiation of the research, we have formulated the following research questions:

Q1: How can the assessment of industrial parks in Hungary be characterized in the 21st century?

Q2: How is the reputation of the industrial park of Győr?

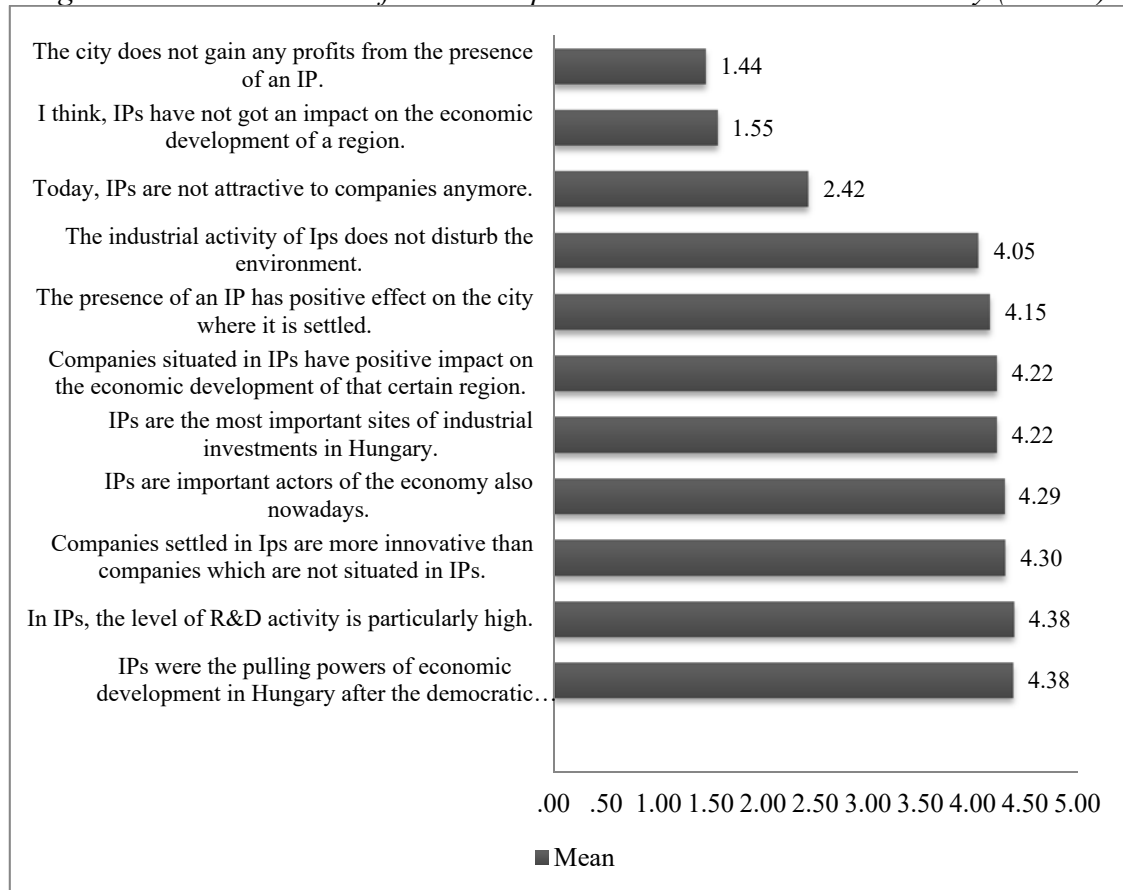
The next sub-chapter gives an answer on the questions above presenting the results of the questionnaire.

Results

85% of the respondents live in a settlement, where within 15 kilometres an industrial park can be found, and the majority (281 people) do live in Győr.

Among the questions related to the general reputation of industrial parks and their assessment one question can be highlighted, where the respondents connected different phrases to the term as part of an open question. Most of the respondents think positively about industrial parks, about which primarily the job creation (10.7%), the industrial production (7.1%) and the economic development (6.2%) comes to their mind.

Figure 2: The assessment of industrial parks and their role in the economy (N=400)



Source: Own edited based on the primary research (2015)

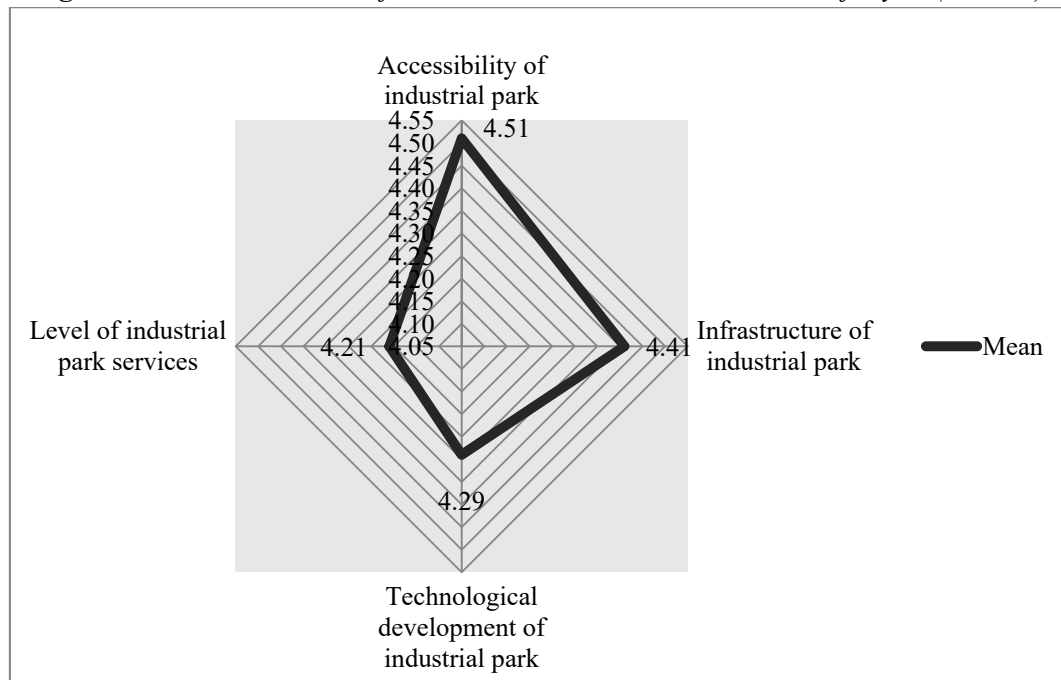
The statements listed in Figure 2 refer to the general reputation and assessment of the industrial parks, which comprise diverse aspects – innovation role, function in the economic development, effects of settlement, and consequences from the perspective of the society, the city and the region. The average values 1 to 5 on the Likert-scale next to the statements express to what extend the respondents (N=400) agree with them.

We come to the conclusion that the assignation expositied in the theoretical overview – saying that industrial parks are important actors of economic development in Hungary – can be considered as sufficient, as all statements got high values. The first three statements of Figure 2 got a low value because the sentence has been phrased purposely as a negation, which means that the respondents agree actually with it, that the industrial parks have a positive effect on the economy of the city and the region.

395 respondents gave an answer on the concrete questions related to the industrial park of Győr, which were focusing on the accessibility, the infrastructure and the services provided, and its technological maturity. Figure 3 summarizes the evaluation of the individual dimensions upon marking the average values of the answers.

The responders had to evaluate all factors on a semantic differential-scale (1-5 scale). At the two end points of the scale there were opposite statements related to the given factor. As shown on Figure 3, all factors got a very positive evaluation, which means that in respect of these dimensions the opinion about the industrial park in Győr is very positive. Summarizing the experience of the quantitative research and giving an answer on the questions, we can say, that industrial parks in Hungary are important economic actors according to the respondents.

Figure 3: The assessment of the International Industrial Park of Győr (N=395)



Source: Own edited based on the primary research (2015)

They couple positive markers to the industrial parks - both as entities and as notions -, their general reputation is very positive in case of all examined dimensions. The assessment of the subject of the examination – the industrial park of Győr – is also very positive, as among the variables investigated we can find outstanding high values.

Among the future research plans we have the national and international comparison of the industrial park of Győr with the formula presented in this study, the first step of which is the assignment of the benchmark industrial parks. The recognition of the professional background would also be important, in relation to the Hungarian industrial parks in general, and as part of it the industrial park of Győr as well.

Conclusions

As a conclusion we can say that Hungarian industrial parks have become important economic actors, which heavily contribute to the economic development, industrial production and the offering of services.

Industrial areas have gone through permanent changes in the last few decades, in Central-Eastern Europe they can be considered as relatively new entities. This doesn't influence their positive assessment and reputation, and even because they are key actors and tools of regional development, and can enhance productivity, employment and competitiveness in a given city or region, their function and *raison d'être* cannot be questioned.

This is confirmed by the national and international specialized literature reviewed by the authors, and also the primary research, with the help of which our elemental hypothesis got proven, that Hungarian industrial parks are considered as the pledge of development. Besides the general assessment of industrial parks, the one established in Győr – as the first ever in Hungary – is still very popular. This is proven by the statistic data related to the park, and also by the assessment of the inhabitants of the county appraised in the results of the research.

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Appendixes

Appendix 1 Introduction of the sample based on quota sampling technique

Age	KSH (2011)	Final sample (2014)
20-29 ages	17,13% (N=61.517)	20,00% (N=80)
30-49 ages	37,67% (N=135.252)	35,80% (N=143)
50+	45,19% (N=162.217)	44,30% (N=177)

Source: Own edited based on the data of Központi Statisztikai Hivatal (KSH) (2014) and primary research (2015)