SLOVAK GAZELLES IN TOURISM AS A DRIVER OF INNOVATION[1]

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Slovenské gazely v cestovnom ruchu ako hnací faktor inovácie

Abstract: *The aim of this paper is to investigate the occurrence of the high-growth enterprises – gazelles in Slovakia. The main part of the paper is oriented to the gazelles in tourism (based on the statistical classification of economic activities NACE Revision 2), which were selected from the list of gazelles compiled by the Statistical Office of the Slovak Republic. Innovation plays an important role in services, and tourism is no exception. As gazelles belong to the most innovative businesses, part of the research covers also the innovation in these enterprises.*

Keywords*: gazelles, tourism, innovation, high-growth enterprises, growth trigger points*

JEL Classification: L 83, M 13

1 Introduction

In recent decades, a great deal of attention is paid to high-growth enterprises. They are at centre of interest of not only researchers and economists, but also politicians. The reason of such interest is their perceived role in advancing economic growth.

The American economist David Birch [3] found that a small number of firms (he called them gazelles) contributed disproportionately to the creation of new jobs. This statement was confirmed also in several later researches (e.g. Henrekson & Johansson [7]; Mitusch & Schimke [10]).

In addition to job creation, gazelles are very important also for dynamism of

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economic and for their advance to economic wealth [2].

One could assume that high-growth enterprises (as well as gazelles) are overrepresented in high-tech industry. On the contrary, the evidence shows that they are overrepresented in services. This is reason why we have focused on tourism in this paper.

Currently, there is absence of research into gazelles in Slovakia. Furthermore, we found that there is not any research on gazelles in tourism in general (in Slovakia as well as abroad).

The aim of the paper is to summarize existing theory about characteristics of gazelles and to point to the fact that they are present also in tourism. The second aim is to reveal dependence of number of gazelles in tourism on the level of regional GDP.

1.1 Methodology

The first part of the paper presents a synthesis of several renowned authors who are active in the study of high-growth enterprises, gazelles and innovation.

Subsequently, we analysed gazelles in tourism and in knowledge-intensive business services (KIBS) in Slovakia (based on the statistical classification of economic activities NACE Revision 2) which were selected from the list of gazelles compiled by the Statistical Office of the Slovak Republic. During the years 2012 and 2013 about 300 gazelles were observed in these sectors. As gazelles in tourism, we considered enterprises from selected sections of NACE Rev. 2 that are depicted in Table 1.

Table 1

Selected sections of NACE Rev. 2 which represent gazelles in tourism

Section H Transportation and storage		**Section K Financial and insurance activities**	
49.1	Passenger rail transport, interurban	64.9	Other financial service activities,except insurance and pension funding
49.3	Other passenger land transport		
49.31	Urban and suburban passenger land transport	65.11	Life insurance
		65.12	Non-life insurance
49.32	Taxi operation	**Section N – Administrative and support service activities**	
49.39	Other passenger land transport n.e.c.		
50.3	Inland passenger water transport	79.1	Travel agency and tour operator activities
51.1	Passenger air transport	79.9	Other reservation service and related activities
52.29	Other transportation support activities	82.3	Organization of conventions and trade shows

Section I – Accommodation and food service activities		**Section Q – Human health and social work activities**	
55.1	Hotels and similar accommodation	86.9	Other human health activities
55.2	Holiday and other short-stay accommodation	**Section R – Arts, entertainment and recreation**	
55.3	Camping grounds, recreational vehicle parks and trailer parks	90.03	Artistic creation
55.90	Other accommodation	90.04	Operation of arts facilities
56.1	Restaurants and mobile food service activities	91.02	Museums activities
56.2	Event catering and other food service activities	91.03	Operation of historical sites and buildings and similar visitor attractions
56.3	Beverage serving activities	91.04	Botanical and zoological gardens and nature reserves activities
		92.0	Gambling and betting activities
		93.1	Sports activities
		93.2	Amusement and recreation activities

Source: own processing.

Subsequently, we used correlation and regression analysis for identification, whether there is a statistically significant correlation between the number of gazelles in selected KIBS and in tourism, and the level of regional GDP in individual regions of Slovakia. We compared results of these two analyses.

We assumed that some gazelles from the year 2012 were present also in year 2013. We discovered only one gazelle in tourism which was present in both years. We have focused on this gazelle and have been trying to identify trigger points of its extraordinary growth.

2 Gazelles and their Position in the Economy

Gazelles represent a subset of high-growth enterprises. There are several approaches to the definition of gazelles:

- Birch et al. [4, p. 46] define gazelles as "*a business establishment which has achieved a minimum of 20% sales growth each year over the interval, starting from a base-year revenue of at least $100,000.*"
- Henrekson and Johansson [7] state that it is possible to use a high-growth threshold and identify gazelles as the x % fastest growing firms.

The most common definition is that by OECD [11, p. 70], according to which all enterprises up to five years old with average annualised growth greater than 20% per annum should be considered gazelles, over a three year period.

There are present also firms that have historically experienced high profitability, but no employment growth. For such firms there was introduced a new term "sleeping gazelles". General characteristics of sleeping gazelles are as follows [5]:

- young and small firms;
- not in an enterprise group;
- with a low share of own-capital in relation to total debt;
- operate in businesses with high profits and low competition in their local market.

Bornhäll et al. [5] suggests that it would be more beneficial to focus policy towards sleeping gazelles because they have better position for further growth.

Previous studies have also identified the most significant contributions of gazelles:

- They increase competitiveness of individual economies [10].
- Several authors argue that gazelles are particularly important for net job creation (Henrekson & Johansson [7]; Mitusch & Schimke [10]).
- Gazelles are important because of their disproportionate contribution to wealth [13].

For instance, four U. S. gazelles (Microsoft, Cisco Systems, MCI and Dell), they had a market valuation equivalent to 13% of the U. S. GDP – despite the short time of their existence [8].

2.1 Evolution of gazelles

According to Amat & Perramons [1] analysis of the Spanish gazelles' evolution in a period of 10 years, it is difficult to sustain high growth rates in sales and profits over time. Table 2 shows factors that influence the development of former gazelles. It is divided in two possible ways of gazelle's development. The first way presents the case of successful companies that have sustained a particular level of growth, whereas the second way represents companies that experienced considerable difficulties (e.g. financial problems or bankruptcy).

Table 2

Key factors that influence the development of gazelles

Gazelle Companies	A few years later: They become normal growth companies	
	Companies that are still growing	Companies in a weaker situation
• Diversification • Innovation • Internationalization • R&D • Growth of income and Profitability	• Diversification of products and markets • Internationalization has increased its outreach efforts • High investment in R&D • Maintenance of policies to improve quality and productivity • Promoted a more professional human resource structure • Conservative in finances, due to betting on the reinvestment of profits and capitalization	• Excessive dependence on certain markets or products • Significant reduction of investment in R&D • Inflexible to change and inadequate response toward new competitors • Slightly conservative finance, opted significant amount of dividends which were divided by the debt

Source: own processing according to Amat & Perramon [1].

Companies that are growing could be characterized as companies, which have invested in areas like R&D, quality, productivity and professionalism of their teams. These companies had a better position to face a recession. On the other hand, the companies whose debts badly increased stopped investing in the development of the companies, and their situation deteriorated in a few years. Such type of evidence may be useful as a model for other companies, which could show them how to stay on the market and be profitable in the future.

2.2 Innovation as a driving force of companies

Innovation offers new solutions to problems [15]. They represent strategic source of increasing competitiveness of production. In the description of innovation, we base our position on Schumpeter [14], who defines innovations as "new ways of doing things", or as "better, unique combinations of the factors of production" shows that innovation comprises a broad spectrum of activities, and the OECD [12] defines it as "the implementation of a new or significantly improved product (good or service), or a process, a new marketing method, or a new organizational method in business practice, workplace organization or external relations".

Innovation is a positive change or improvement based on the use of something new. Theory of innovation distinguishes technological and non-technological innovation. Technological change is the change of product or service and process innovation. Non-technological innovation presents organizational innovation or marketing innovation. Technological innovation is dominant type for all types of businesses.

Service companies have technological innovation (manufacturing and industrial companies) to a lesser extent. Business services more widely implemented non-technological innovation. The reason is easy imitation of product innovation in the area of service production and simultaneously immunity non-technological against imitation effect [9].

2.3 Gazelles in tourism in Slovakia

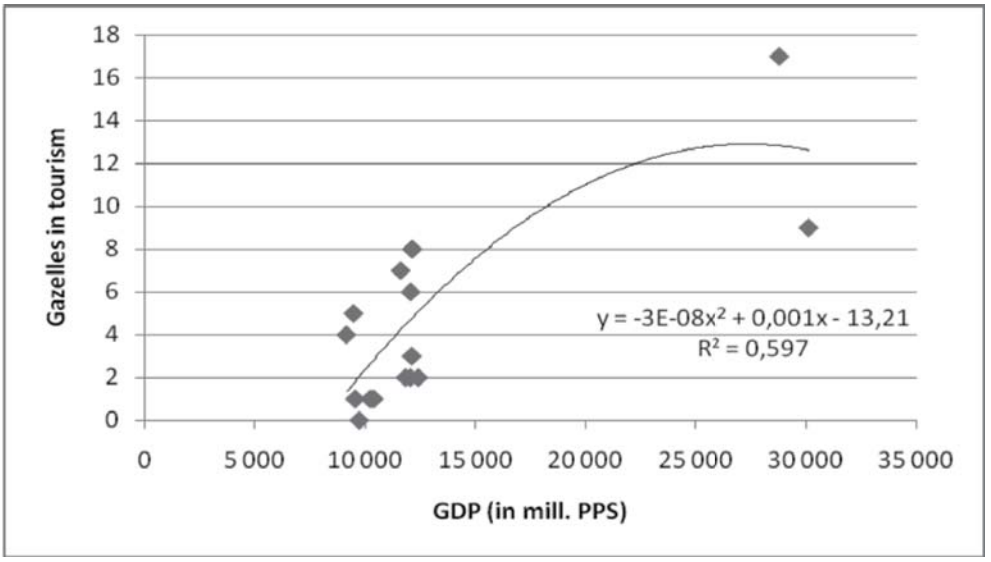
For detailed review on gazelles in Slovakia, we appled the correlation analysis and the polynomial regression analysis. We monitored regional GDP (in mill. PPS) and number of gazelles in the period 2012 – 2013. The data was collected via Statistical Office, and we focused on analyses of gazelles in tourism and in knowledge intensive business services.

We assumed that there was a dependency between regional GDP (independent variable) and number of gazelles in tourism (dependent variable). In processing the input data from the Statistical Office of the Slovak Republic there were used methods of scientific work, correlation and regression analysis.

In Figure 1 there is depicted the result of correlation and regression analysis between number of gazelles in tourism and regional GDP (in million PPS).

Figure 1

Result of correlation and regression analysis between number of gazelles in tourism and regional GDP (in million of PPS)



Source: own processing.

Note: PPS = purchasing power parity.

Regression analysis revealed that there is a strong dependence (Pearson correlation coefficient = 0.7536) between number of gazelles in tourism and regional GDP. The model explained 56.79% to input data and as p-value was 0.0007<0.005, we can consider this model as statistically significant.

We regard as an interesting fact that there is a stronger dependence (Pearson correlation coefficient = 0.9799) between the number of gazelles in knowledge intensive business services (KIBS) and regional GDP than it was by gazelles in tourism.

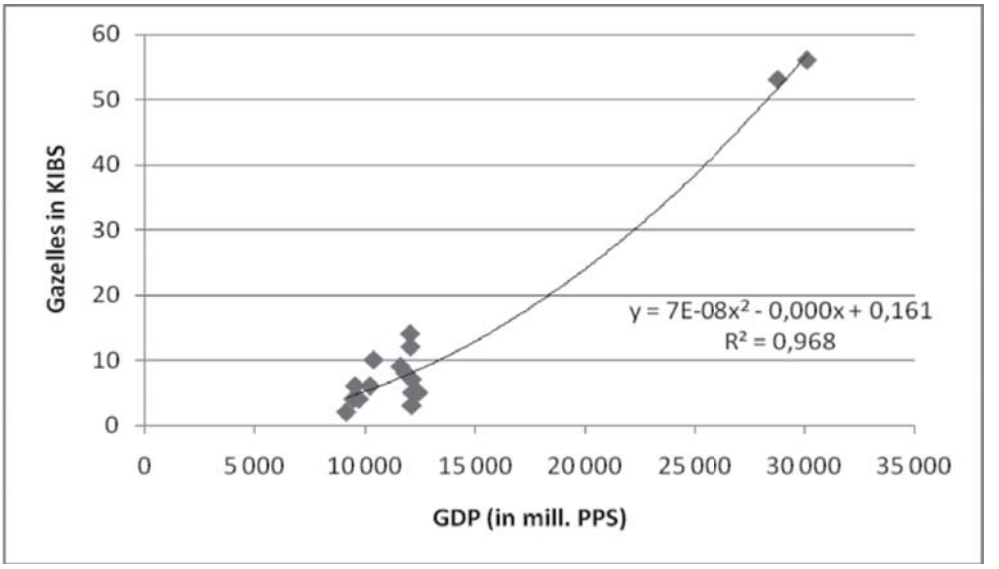
In Figure 2 there is depicted the result of correlation and regression analysis between number of gazelles in KIBS and regional GDP (in million of PPS).

We consider the difference of regression analysis results could be caused by different factors that emerge in case of tourism. These could be factors like attractiveness of destinations, tourism infrastructure, natural and cultural resources, density and quality of accommodation establishment, as well as seasonality.

During the analysis of list of gazelles in tourism in period 2012 – 2013 we have found just one gazelle which was present in both years. Subsequently, we tried to identify what was the trigger point of extraordinary growth of that enterprise.

Figure 2

Result of correlation and regression analysis between number of gazelles in KIBS and regional GDP (in million of PPS)



Source: own processing.

Note: KIBS = knowledge intensive business services; PPS = purchasing power parity.

2.3.1 Analysis of growth trigger points of Alexandra Hotel, s.r.o.

Alexandra hotel, s.r.o. was founded on 10th of October in 2007. In terms of its core economic activity, it is classified in Category 55.1 Hotels and similar accommodation of the NACE Rev. 2 classification.

This enterprise was considered as a gazelle in both monitored years 2012 and in 2013. It is interesting that in the year 2012 it was a gazelle when measured on the basis of employment growth as well as on the basis of turnover growth. In 2013 the Alexandra Hotel, s.r.o. did not achieve above-the-average turnover growth, but it remained a gazelle according to employment growth.

We aimed our research to finding the trigger point that caused Alexandra Hotel, s.r.o. to become a gazelle. Brown & Mawson [6] state that there are some trigger points which help to understand why enterprises can grow. Particularly kind of trigger points can be seen in Table 3. We can divide trigger points in three groups: endogenous, exogenous and co-determined. In the first group, there are triggers that stem from the internal environment of an enterprise (e.g. new offer of products and services, or development of a new production process). As exogenous are known trigger points that come from the external environment of an enterprise. For instance, it can be some change to public policy, technological development or access to public sector assistance. The last group represents combination of the two previous groups. An example of such triggers is entry into a joint venture or acquisition by another firm.

Table 3

Classification of growth trigger points

Endogenous	Exogenous	Co-determined
• New product/service offering • Change in company ownership • Acquisition of another firm • Change in management or board personnel • Development of a new production process • Implementation of new management systems	• Technological development • Government regulatory issues • Macroeconomic changes • Changes to public policy • Access to public sector assistance (e.g. R&D or capital expenditure grants) • Product failure in the marketplace	• Entry into a joint venture • Acquisition by another firm • Major new capital investment • Adoption (or adaptation) of new business models • Injection of risk capital or new bank funding • Receipt of a major contract or obtaining a new customer

Source: R. Brown & S. Mawson [6, p. 286].

On the basis of our analyses we propose that in the case of Alexandra Hotel, s.r.o., the main trigger point was non-repayable grant from the European Regional Development Fund. This grant was used for rebuilding and addition to an old hotel.

The reconstruction was realized since October 2009 until December 2011. The amount of grant requested from the European Regional Development Fund was EUR 5.045.809,32.

We suppose that other triggers depended on this main trigger point. The hotel rebuilding resulted in offer of new products and services, e.g. a 25-metre swimming pool, wellness featuring salt inhalation therapy, herbal steam, Finnish sauna, cool down tub, whirlpool, water foot massage, icy deluge shower, warming room, Scottish water jets, tropical rain showers, as well as rehabilitation and massage.

3 Conclusions and Policy Implications

Central topic of this paper was gazelles and their presence in tourism in Slovakia. It is assumed that there are several trigger points which cause the growth of firms. One of these triggers is also innovations, which represent strategic source of increasing competitiveness of production. From this point of view it is very important issue of innovation barriers and their gradual reduction or even removal. Therefore, politicians on national as well as on international level discuss how to support implementation of innovation into practice. According to Bornhäll et al. [5] it might be more productive to focus on getting more firms that are profitable but not growing, to start employing additional personnel.

Because we have not found any research of gazelles in tourism we consider this paper as an interesting contribution to the existing research on gazelles.

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