



Attractiveness of municipalities in South-Western Poland as determinants for hotel chain investments



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HIGHLIGHTS

- Identification of the location factors.
- Forming a ranking of the municipalities.
- Presentation of recommendations for the municipalities.

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ABSTRACT

The selection of a location for a hotel is a decision of paramount importance, and requires a consideration prior to any investment being made. The choice of an appropriate location can meet demand, contribute to the local economy and aid guest satisfaction. This article attempts to identify the principal factors determining the location of hotels belonging to a chain. The data cover a period from 2000 to 2009 in three municipalities in the Lower Silesian, Opole and Silesian Voivodeships in Poland. The results indicate that the following factors were crucial for investors; namely, land prices, level of economic development, and the degrees of internationalization and urbanization at the site.

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1. Introduction

In the hotel industry, the most important decision to be undertaken during the pre-investment stage refers to the actual site of the hotel. This is crucial not only for hotel performance but also for potential hotel guests and tourism destinations (tourist reception area). Location influences the costs and revenues of the hotel, and impacts upon hotel profitability (Aissa & Goaid, 2016) and other economic performance indicators (Chung & Kalnins, 2001; Lado-Sestayo, Otero-González, & Vivel-Búa, 2014; Parte-Estebana & Alberca-Olivera, 2015; Sainaghi, 2011; Sohrabi, Vanani, Tahmasebipur, & Fazli, 2012). The decision as to the location of the hotel shapes costs of land acquisition, hotel construction expenses and maintenance costs – expenditures for human and capital resources, raw materials, external services, transport and fiscal burdens (Baum & Mezas, 1992; Silva, 2015). Location also influences the size and seasonality of tourism demand (Guizzardi & Bernini, 2010; Moliner, Claver, & Molina, 2011), as well as the prices of hotel

services (Abrate, Capriello, & Fraquelli, 2011; Rigall-I-Torrent et al., 2011), which are directly reflected in financial income. Crucial in the process of selecting a location is also the fact that such a decision is long-term in nature and is burdened with a high risk of changes in conditions for conducting business activity in a given destination (Yang, Luo & Law, 2014).

Even more than the facilities on offer, location is the most crucial factor determining the decision of choosing a hotel by guests (LeBlanc & Nguyen, 1996). This is caused by the fact that it is associated with safety, convenience of reaching tourist attractions or business destinations, the charm of the place itself or its surroundings (Chu & Choi, 2000). And finally, it notably impacts upon the satisfaction of guests staying at the hotel (Goranczewski & Puciato, 2011; Sim, Mak, & Jones, 2006). Moreover, running hotel chains, especially those owned by multinational corporations, brings many benefits for tourist reception areas, while it contributes to the growth of tourist traffic (Rogerson, 2012), more frequent organization of business events (Wan, 2011), a growth in direct investments, a rise in the number of available jobs (Gu, Ryan, & Yu, 2012), and consequently, it improves investment attractiveness, the image of the area, and living standards of the local community

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(Assaf & Josiassen, 2012; Tsai, Song, & Wong, 2009).

Chain hotels willing to expand their service potential in a given market usually undertake two alternative methods: direct and indirect strategies for investments (Kundu & Contractor, 1999; Martorell, Mulet, & Otero, 2012; Ramon Rodríguez, 2002). The first is based on capital and involves direct involvement of hotel groups in a given market, which means building facilities and launching a new hotel by committing their own resources. While, the second strategy entails implementation of a hotel business in cooperation with other business entities based for example on: leases, licensing agreements, strategic alliances, joint ventures or franchising.

Hotel groups that choose to invest their capital directly in a given country (region or locality) create a list of potential locations, which is developed based on their standards for localization, shared identity and/or previous experience. The subsequent step, which seems to be crucial for the whole process and which is the major research concern of this paper, is specification on localization factors and hence certain specific characteristics of the particular locations, which also have an impact on capital expenditures and on the profitability of economic activity. The investor analyzes potential sites for setting up a hotel, having regard to the analysis of measures depicting various factors of location. After gathering relevant statistical data and their analysis, particular locations of sites are ranked and the most prosperous are selected.

Despite the fact that there are many published studies referring to issues of chained-brand hotel location determinants (e.g., Johnson & Vanetti, 2005; Kundu & Contractor, 1999; Zhank, Guillet, & Gao, 2012), there is a gap in research on the markets of Central and Eastern Europe, which are still less developed; however, they are rapidly growing. A good example is the market in Poland, where the dominant position is still held by the so-called independent hotels, i.e. sites independent of any hotel group or chain, owned by domestic entrepreneurs operating in the small and medium-sized enterprise sector. In the year 2014, independent hotels represented 85% of all hotel facilities located in Poland, and they offered 63% of accommodations available in the hotel database (2014 Market Review Report: Hotel Market in Poland). The subject matter of previous studies was restricted to the issue of the identification of key factors for hotel location and on this basis rankings were created, which listed the most attractive places for investments. In addition, location factors for hotel start-ups were rarely analyzed and the focus was usually placed explicitly on facilities that were already in business. This factor seems to be important because of both the possible changes in the importance of individual location factors for investors, as well as changes in their values. One of the major objectives of this study is to reduce these specific research gaps.

In the context of the remarks presented in the introduction section, the main cognitive objective of the article is an attempt to define the most important factors determining the place of location for chained-brand hotels. The study attempts to undertake a comprehensive assessment of the issue of determining the rationale for the location of hotels; the study also aims to create a ranking of the most attractive communes for potential investors and to present certain general recommendations for the proposed activities of local authorities seeking to improve the investment attractiveness of the analyzed territorial units.

Due to the limited accessibility and high costs associated with collecting statistical data, the spatial extent of the research was limited to the area of South-Western Poland, namely the Lower Silesian, Opole and Silesian Voivodeships. These regions are differentiated according to their cultural, social, economic and natural attributes and they have various levels of tourism attractiveness. The large regional diversity of this part of the country enables certain reasonable assumptions about all Poland to be

stated.

The time period of the research covered the years 2000–2009. The purpose for adopting the year 2000 as the beginning period for the analysis was the assumption that this year represented the end of the transformation of the political system in Poland. Two circumstances influenced the choice of the year 2009 as the end period for the analysis. The first, caused by crises, is that in 2009 in Poland for the first time since 1989 there was observed a decline in hotel financial performance, both in terms of both hotel guest numbers and occupancy rates. The second reason is that since 2010 a sharp growth in the hotel market in Poland can be observed. In 2014 the number of available beds in hotels increased by approx. 38% compared to the year 2009. Most facilities launched at that time in Poland are chained-brand hotels of standard or high quality. There were even higher growth dynamics related to the demand for hotel services, which in 2014 increased by more than 50% compared to 2009 (Hotel market in Poland. Report 2015). This was boosted by the good performance of the Polish economy, the inflow of financial funds from the European Union directed mainly toward investments, and the organization of several major events, including the UEFA European Championships in 2012. According to the author, performing an assessment of determinants governing the decision of selecting locations for hotels launched in Poland after 2009, i.e. in the period when the economic environment was changing very fast, could result in misleading conclusions.

The structure of the article is as follows. Section 2 gives an overview of the most crucial nomenclature on issues concerning chained-brand hotel location determinants. Section 3 deals with a detailed description of the research test methods used in the study. Section 4 represents my own empirical studies and a discussion of the results of other authors' research. Section 5 summarizes issues evaluated in the paper and provides practical recommendations, as well as suggested directions for further research on the problems of estimating hotel location determinants.

2. Literature review

In general, it can be stated that all chained-brand hotel location factors identified in the course of the literature study can be divided into four main groups: the level of economic growth, the level of economic, political, legal and cultural stability, the degree of internationalization of the economy, and specific factors related to the hotel industry market. In the case of international hotel chains, these factors are analyzed at local, regional and national levels. However, according to national chains, a local or, optionally, regional perspective seems to be important.

Significant meaning for the process of new hotel location, assigned in the nomenclature as the level of economic growth (Adam & Amuquandoh, 2013; Assaf, Josiassen, & Agbola, 2015; Baum & Haveman, 1997; Chen, 2010; Demirbag, Tatoglu, & Glaister, 2007; Johnson & Vanetti, 2005; Kundu & Contractor, 1999; Luo & Yang, 2012; Martorell et al., 2012; Puciato, 2012; Ramon Rodríguez, 2002; Shu & Dai, 2002; Zhank et al., 2012), arises from the fact that, among others, the size of GDP and dynamics are highly correlated with such factors as effective demand, the amount and price stability of production factors, access to modern transport infrastructure and information technology, and the quality of human capital and its costs. Perspectives for developing a new chained-brand hotel depend largely on the factors mentioned above. Due to the previously indicated reasons, hotel groups are mostly interested in investing their capital in countries (regions, communes) with the highest level of economic development or in places, where such a level of development is almost reached or in the very near future will be reached.

Research by Alegre and Cladera (2006), Assaf et al. (2015),

Brouthers, Brouthers, and Werner (2000), as well as, by Johnson and Vanetti (2005) indicate that the level of stability of the reception area is an important location factor for hotel chains. This includes political, economic, cultural, and also legal stability. Poor stability in each of these areas is associated with an increased risk to investment, which means that hotel groups resign from undertaking investments in such places or they decide to invest in those places but in the form of indirect capital investments (Kundu & Contractor, 1999; Ramon Rodríguez, 2002).

Results from research carried out by many authors (e.g. Assaf et al., 2015; Kundu & Contractor, 1999; Luo & Yang, 2012; Novak, Petrić, & Pranić, 2011; Ramon Rodríguez, 2002) also indicate the degree of internationalization of the economy as an important incentive for location of integrated hotels. Consequently, a high degree of internationalization can become for international hotel groups a good predictor of opportunities for running business activities, while it indirectly indicates the limited number of input barriers to a given market (Martorell et al., 2012). A high degree of internationalization usually brings fewer disproportionate cultural differences between potential investors and inhabitants of the area in which a new hotel will be launched. However, results from such authors as Barkema, Bell, and Pennings (1996), Johanson and Vahlne (1990), and Ramon Rodríguez (2002) point out these location factors as being strongly important for decision making when choosing a localization for a foreign entity, including a chained-brand hotel.

Among factors specific for the hotel market being considered by hotel groups usually are: the size of the target market and its structure (dominant segment of hotels), spatial concentration of hotel operators, presence of cluster structures, frequency and importance of the organized events, tourist attractions and tourism policy.

The things that matter for potential investors are: the size of the local market and its dominant hotel segment. On the one hand, significant competition in the segment of hotels with similar standards can limit the possibility of future gains for a commercial entity; on the other hand, it can bring the classic benefits raised from agglomeration (Canina, Enz, & Harrison, 2005; Chung & Kalnins, 2001; Egan, Chen, & Zhang, 2006; Yang & Fik, 2011; Yang, Wong, & Wang, 2012; Zhank et al., 2012). According to the study by Chen and Dimou (2005), the second aspect is key for hotel chains that are usually financially strong and have in their portfolios specific brands. The presence of cluster structures also relates to benefits derived from agglomeration (Enz, Canina, & Liu, 2008; Zhank et al., 2012).

Other factors determining the location of a chained-brand hotel described in the literature are: frequency and rank of hosted sports, cultural and commercial events (Broadway, 1993; Zhang, Guillet, & Gao, 2012) and tourism attractiveness in the area of reception (Crecente, Santé, Díaz, & Crecente, 2012; Polyzos & Minetos, 2011; Yang & Fik, 2011). Nowadays, large, mass and international events frequently attract large numbers of tourists to the destination point. This in particular relates to the development of such types of tourism services as: business, sports or cultural tourism (Broadway, 1993; Hadzik & Grabara, 2009). However, high natural values in regards to leisure tourists and anthropogenic values in the case of cognitive tourists are often the main determinants for the size of tourism demand. The importance of tourism values is particularly high for holiday hotels situated in towns with developed tourism functions and for facilities located in towns rich in interesting monuments and other man-made objects (Crecente et al., 2012; Hobson, 1994; Polyzos & Minetos, 2011; Sund, 2006). These factors can largely determine the size and structure of demand for hotel services, and consequently, this can be an important predictor of capacities for hotels to generate future profits.

Some researchers, e.g. Assaf and Josiassen (2012), Assaf et al. (2015), Buckley et al. (2007), Martorell et al. (2012) and Zhank et al. (2012), have also pointed out the importance of tourism policy in the areas of reception. Sometimes they are used for specific incentives targeted to attract potential investors and concern issues in such fields as: fiscal (taxes and local fees – their rates and the possibility for their deferral, write-off, exemption or spreading into instalments of overdue tax payments), planning and administrative (general strategies, strategies for tourism development, brand strategies, spatial development plans, efficiency for issuing administrative decisions, the quality of real estate management, etc.), informational (economic and investment advice) and infrastructural (building and modernizing the infrastructure).

3. Research methods

The study was based on a research procedure comprising the following stages: (1) identification of the most crucial factors for the location of chained-brand hotels; (2) performing exploratory tests on these factors and their final specification; (3) empirical verification of location factors; and (4) formulating a ranking of the most attractive municipalities for potential hotel investors based on the revised location factors.

During the first stage of the research, the literature content analysis method was used to analyze available references and on this basis factors determining the location of chained-brand hotels were identified. This stage of the research was based on studies by the following authors: Adam and Amuquandoh (2013), Assaf and Josiassen (2012), Assaf et al. (2015), Broadway (1993), Chen and Dimou (2005), Crecente et al. (2012), Egan et al. (2006), Enz et al. (2008), Guizzardi and Bernini (2010), Johnson and Vanetti (2005), Kundu and Contractor (1999), Lado-Sestayo et al. (2014), Martorell et al. (2012), Lado-Sestayo, Otero-González, and Vivel-Búa (2011), Novak et al. (2011), Parte-Estebana and Alberca-Olivera (2015), Polyzos and Minetos (2011), Puciato (2012), Ramon Rodríguez (2002), Shu and Dai (2002), Yang and Fik (2011), Yang et al. (2012), and Zhank et al. (2012).

Subsequently, a list of location factors formulated based on the literature review was proposed. However, this list was only tentative at this point in the process. At this stage of the study a diagnostic survey method was used – in-depth interviews categorized by open-ended questions. A paper-based questionnaire formulated by the author was used and this consisted of seven open questions regarding certain aspects of hotel location and description. Questions in the main part of the questionnaire related to: the course of the process for selecting locations, potential considerations of other, alternative locations for the hotel, determinants based on such factors as economic development, economic, political and cultural stability, the degree of internationalization of the economy and factors specific for the hotel market in the chained-brand hotel location process and the applied sources and methods for gathering information on potential locations for building a hotel. However, the description consisted of questions related to such hotel characteristics as: legal and organizational form, ownership, size of the entity (number of employees and annual net turnover), hotel quality standard, type, origin of the financial capital and number of rooms and beds. The interview questionnaire was validated via pilot studies and all identified errors and ambiguities were revised. Surveys (interviews) with owners or managers of hotels were performed in the first half of 2011. Sample selection for the research consisted of a targeted group of respondents, namely selected hotels (12), the owners of which expressed their consent to participate in the survey. This represented approx. 55% of all chained-brand hotels launched within the area of the analyzed voivodeships in the years 2000–2009.

During this stage of the study, an analysis of survey results was performed and these results were compared with results from the literature content analysis. Consequently, by applying such mental operations as: abstraction, reduction or generalization, specification of key factors for chained-brand hotel location was performed and measures derived from this enabled a statistical analysis to be performed. Additionally, the nature (quantitative or qualitative) of measures describing individual location factors was described, and the possible direction of their correlation with the location of network hotels was indicated (Table 1).

In the third stage of the research study an empirical verification of location factors was performed (see Table 1). The verification was objective in nature and consisted of the actual locations of hotels

launched in three Polish provinces in 2000–2009, namely: Lower Silesia, Opole and Silesian Voivodeships. In order to determine the key factors determining the selection of hotel locations, documentary and statistical methods were applied. By using the method of documentary analysis, statistical data were gathered from secondary sources, inter alia, from the analyzed hotels and municipalities, as well as from the Central Statistical Office in Warsaw. The collected data concerned both the hotels themselves and measures describing specified location factors in municipalities. The research was full, because the statistical community consisted of all chained-brand hotels running in 2000–2009 ($n = 22$) and operating in municipalities ($n = 408$) of the analyzed voivodeships.

Within the framework of this statistical verification, the value of

Table 1
Characteristics of the factors and measures for location described in the study.

Location factors	Measures describing location factors	Nature of the measures	Expected direction of correlations for hotel location
Access to qualified labor force	1. Availability of secondary and higher education offering training in tourism professions	1. Qualitative: yes (1) or no (0)	1. +
Labor costs	1. Average monthly gross salary in Section 1 of PKD (Poland's Classification of Business Activities)	1. Quantitative: amount of money in PLN	1. ±
Availability of investment land	1. Total municipal land surface area	1. Quantitative: number of hectares	1. +
Land prices	1. Average transaction price of land allotted for investments per 1 m ²	1. Quantitative: amount of money in PLN per 1 m ²	1. ±
Level of economic development	1. Incomes of the municipalities per capita	1. Quantitative: amount of money in PLN per capita	1. +
Degree of internationalization of the economy	1. Number of business entities with foreign capital registered in the REGON system	1. Quantitative: number of business entities	1. +
Urbanization	1. Number of business entities registered in the REGON system 2. Population density	1. Quantitative: number of business entities 2. Quantitative: number of inhabitants per 1 km ²	1. + 2. +
Availability of means of transport	1. Local public transport 2. Long-distance bus or train public transport 3. The distance from the nearest exit from a motorway or expressway	1. Qualitative: yes (1) or no (0) 2. Qualitative: yes (1) or no (0) 3. Quantitative: number of kilometers	1. + 2. + 3. –
The size of tourism demand	1. Total number of overnight stays offered for total number of tourists per year 2. Number of overnight stays offered for foreign tourists per year	1. Quantitative: number of overnight stays per year 2. Quantitative: number of overnight stays per year	1. + 2. +
The size of local demand	1. Retail sales in current prices	1. Quantitative: amount of money in PLN	1. +
Tourist assets	1. Places (sites) entered on the UNESCO world list or Historic Monuments 2. Having the status of spa resort or presence of unique tourist attractions (such as amusement parks) 3. Presence of national or landscape parks	1. Qualitative: yes (1) or no (0) 2. Qualitative: yes (1) or no (0) 3. Qualitative: yes (1) or no (0)	1. + 2. + 3. +
Tourism supply (non-hotel services)	1. Number of business entities active in food-related sector 2. Number of business entities providing services in the creative (arts and entertainment) sector 3. Number of business entities active in sports and recreation sector	1. Quantitative: number of business entities 2. Quantitative: number of business entities 3. Quantitative: number of business entities	1. + 2. + 3. +
Enhancement of competition in the sector	1. Number of hotel facilities such as hotels, motels and guest houses – competition in hotel sector 2. Number of hotels – competition in the same market segment	1. Quantitative: number of hotel facilities 2. Quantitative: number of hotels	1. ± 2. ±
Fiscal incentives	1. The rate of property tax (buildings used for business purposes) is lower than the maximum rate 2. Functioning system of incentives for investors (e.g. tax credits and tax exemptions)	1. Qualitative: yes (1) or no (0) 2. Qualitative: yes (1) or no (0)	1. + 2. +
Planning and administrative incentives	1. Owning own strategy or development plan regarding tourism industry 2. Provision of area spatial development plan 3. Number of towns and municipalities having foreign partnership agreements	1. Qualitative: yes (1) or no (0) 2. Qualitative: yes (1) or no (0) 3. Quantitative: number of towns and communes	1. + 2. + 3. +
Information incentives	1. The amount of expenditure on tourism per capita 2. Eligibility of business entities to benefit from free consulting services	1. Quantitative: number of money in PLN per capita 2. Qualitative: yes (1) or no (0)	1. + 2. +

Source: own study based on surveys and research studies by Adam and Amuquandoh (2013), Assaf and Josiassen (2012), Assaf et al. (2015), Broadway (1993), Chen and Dimou (2005), Crecente et al. (2012), Egan et al. (2006), Enz et al. (2008), Guizzardi and Bernini (2010), Johnson and Vanetti (2005), Kundu and Contractor (1999), Lado-Sestayo et al. (2014), Martorell et al. (2012), Lado-Sestayo et al. (2011), Novak et al. (2011), Parte-Estebana and Alberca-Olivera (2015), Polyzos and Minetos (2011), Puciato (2012), Ramon Rodríguez (2002), Shu and Dai (2002), Yang and Fik (2011), Yang et al. (2012), Zhank et al. (2012).

the information analysis assessing variables regarding their discriminatory capability and information potential was assessed (Nermend, 2009).

To assess the discriminatory ability, the positional coefficient of variation was utilized and in the set were left such variables, the coefficient value of which satisfy the inequality:

$$V(x_j) \geq \epsilon, (j = 1, 2, \dots, m)$$

In accordance with Hellwig (1968), the value of $\epsilon = 10\%$ was adopted.

The information capacity analysis of variables was based on the parametric method proposed by Hellwig (1968). The set contained variables, which satisfied the condition:

$$r_{jj'} > r^*, (j, j' = 1, 2, \dots, m)$$

In accordance with Hellwig (1968), the value of $r^* = 0.5$ was adopted.

All measures describing factors for chained-brand hotel locations summarized in Table 1 have successfully passed the foregoing statistical procedures and were incorporated into the set of diagnostic variables.

The main statistical method enabling implementation of the cognitive objective of the article was the logistic regression (Hosmer & Lemeshov, 2000). For the study, the question of launching (yes = 1) or not launching (no = 0) facility by a hotel chain within the territory of municipalities in a given year was adopted as the response variable. The predictor variables were diagnostic variables (measures describing hotel location factors), which characterize all the municipalities located within the area of the analyzed voivodeships. The study assumes a 2-year delay between the response variable and predictor variables based on pragmatic concerns, as practice shows that the average economic investment process starts with planning activities and ends at the time of opening the hotel, a period which lasts approximately two years.

This study employed stepwise logistic regression with backward elimination of regressors. Therefore, the iterative elimination was implemented for subsequent variables with the highest level of *ex post* significance for the Wald Chi-Square test in the logistic regression model. This means that the method initially considered all diagnostic variables and then the variables which did not have a significant impact on improvement of the model accuracy were gradually eliminated. The logistic regression model developed based on this algorithm, and thus including the location factors which are statistically significant, is shown in Table 2.

The fourth stage of the research consisted of developing a ranking of the most attractive communes for potential hotel

investments. One of the taxonomic methods was applied for this purpose, namely the one formulated by Hellwig (1968) – the method of hotel development patterns. This allowed the linear ordering of municipalities, listed from the most to the least attractive investment areas; and this ranking was based on the development measure calculated on the basis of predictor measure values specified in the logistic regression model, that is, on location factors. The type of variable (stimulant, destimulant) was designated on the basis of the sign located by the logistic regression model parameters. If the sign of the variable was(–), it was classified as a destimulant; while variables marked with a(+) sign were designated as stimulants with respect to the adopted criterion (investment attractiveness). Linear ordering, based on this method, was conducted in accordance to the following stages (Hellwig, 1968):

1. Normalization (standardization) of variables allowing unification of unit-of-measure variables and ordering of their sizes according to the formula:

$$z_{ij} = \frac{x_{ij} - \bar{x}_j}{S_j}, (i = 1, 2, \dots, m)$$

where: z_{ij} – normalized value of x_j variable for the i -th object,

\bar{x}_j – arithmetic mean of x_j variable,
 S_j – standard deviation of x_j variable.

As a result of the standardization, a matrix of standardized objects is developed:

$$Z = \begin{bmatrix} z_{11} & z_{12} & \dots & z_{1j} & \dots & z_{1m} \\ z_{21} & z_{22} & \dots & z_{2j} & \dots & z_{2m} \\ \vdots & \vdots & & \vdots & & \vdots \\ z_{i1} & z_{i2} & \dots & z_{ij} & \dots & z_{im} \\ \vdots & \vdots & & \vdots & & \vdots \\ z_{n1} & z_{n2} & \dots & z_{nj} & \dots & z_{nm} \end{bmatrix}$$

where:

z_{ij} – is a standardized value of x_j variable for the i -th object.

2. Determining an abstract object–development pattern z_0 with the highest values of the observed variables:

$$z = [z_{01} \ z_{02} \ \dots \ z_{0j} \ \dots \ z_{0m}]$$

where:

$z_{0j} = \{\max z_{ij}, \text{ if } z_j \text{ variable is a stimulant}\}$
 $z_{0j} = \{\min z_{ij}, \text{ if } z_j \text{ variable is a destimulant}\}$

Table 2

Results of logistic regression for a dependent variable: establishment of a chain-branded hotel, and for independent variables: measures describing the location factors.

Model parameters	Location factor	Measure	B	Standard error	Wald chi-square test	Significance	95% confidence interval
Integrated BO = -5.99 $\chi^2 = 27.96$ p = 0.00 R ² = 0.94	Land prices	Average transaction price of land allotted for investments per 1sqm	-9.56	1.52	39.56	0.00	-12.6 -6.52
	Level of economic development	Incomes of the municipalities per capita	1.23	0.15	67.24	0.01	0.93 1.53
	Degree of internationalization of the economy	Number of business entities with foreign capital registered in the REGON system	0.55	0.17	10.47	0.01	0.21 0.89
	Urbanization	Population density	0.02	0.01	4.09	0.01	0.00 0.03

Notations: B – values of parameter estimates of the model, standard error – asymptotic standard errors of parameter estimates, Wald chi-square test – the value of Wald chi-square statistics examining the significance of parameters, significance – likelihood levels *p* for Wald test, 95% confidence interval – the upper and lower limits of 95% confidence interval for parameters, BO – the value of the constant (intercept) in the model, χ^2 – the values of goodness-of-fit statistics, *p* – the likelihood rate of goodness-of-fit statistics of the model, R² – Nagelkerke Generalized Coefficient of Determination.

Source: Own study based on the implemented empirical research studies.

3. Determining an abstract object – anti-pattern z_{-0} with the lowest values of each variable:

$$z_{-0} = [z_{-01} \ z_{-02} \ \& \ z_{-0j} \ \& \ z_{-0m}]$$

where:

$$z_{-0j} = \{\min z_{ij}, \text{ if } z_j \text{ variable is a stimulant}\}$$

$$z_{-0j} = \{\max z_{ij}, \text{ if } z_j \text{ variable is a destimulant}\}$$

4. Testing similarity between objects and the abstract best-matched object by estimating the Euclidean distance between each object and the ideal solution for development patterns:

$$d_{i0} = \sqrt{\sum_{j=1}^m (z_{ij} - z_{0j})^2}, \quad (i = 1, 2, \dots, n),$$

where:

d_{i0} – the Euclidean distance between the i th object and the ideal solution for development patterns.

5. Estimating the measure of development for each object:

$$m_i = 1 - \frac{d_{i0}}{d_0}, \quad (i = 1, 2, \dots, n),$$

where:

m_i – measure of development pattern for i -th object,

d_0 – the distance of each object between the ideal solution and negative ideal solution to be estimated from the formula:

$$d_0 = \sqrt{\sum_{j=1}^m (z_{0j} - z_{-0j})^2}$$

Based on the calculated development-based measure, a ranking of the 30 most attractive municipalities for potential investors (hotel chains) was formed for each of the analyzed years (Tables 3 and 4). All computations carried out for the purpose of this study were performed with SPSS Statistics 20 software, and statistical reasoning was performed at the assumed *ex ante* significance level of $\alpha = 0.05$.

4. Research results and discussion

Both the verification of statistical variables conducted based on the assessment of their informational value and the application of backward stepwise logistic regression algorithm allowed the selection for the model of a set of explanatory variables, which were statistically significant and which matched most accurately. Thanks to the application of these statistical procedures, it was possible to avoid the problem of an excessively strong correlation of variables, which could lead to serious disturbance in the reliability of the estimators of the model parameters. This is objectively proved by the value of statistics of the goodness adaptation ($\chi^2 = 27.96$) and by the very low probability level ($p = 0.00$). This means that the described model differs significantly from a model consisting explicitly of absolute terms, while the location factors which formed the model influenced in a statistically significant manner the decision by hotel chains to establish a hotel within Lower Silesia, Opole and Silesia voivodeships during 2000–2009. The

Table 3
2000–2004 Ranking of the 30 best municipalities with the most favorable conditions to establish integrated hotel chains.

No.	Year 2000 (n = 2)			Year 2001 (n = 2)			Year 2002 (n = 2)			Year 2003 (n = 4)			Year 2004 (n = 1)		
	Commune name	m_i	H	Commune name	m_i	H	Commune name	m_i	H	Commune name	m_i	H	Commune name	m_i	H
1	Wrocław	0.49	yes	Wrocław	0.50	no	Wrocław	0.49	yes	Wrocław	0.50	yes	Wrocław	0.50	no
2	Katowice	0.38	yes	Katowice	0.40	no	Katowice	0.39	no	Katowice	0.41	yes	Katowice	0.41	no
3	Opole	0.29	no	Opole	0.30	no	Opole	0.30	no	Opole	0.31	no	Opole	0.30	yes
4	Bielsko-Biała	0.28	no	Bielsko-Biała	0.29	no	Bielsko-Biała	0.29	no	Bielsko-Biała	0.30	no	Bielsko-Biała	0.30	no
5	Gliwice	0.24	no	Gliwice	0.26	no	Gliwice	0.26	no	Gliwice	0.27	no	Gliwice	0.27	no
6	Częstochowa	0.23	no	Jelenia Góra	0.25	no	Jelenia Góra	0.24	no	Częstochowa	0.25	no	Częstochowa	0.25	no
7	Bogatynia	0.22	no	Częstochowa	0.24	no	Częstochowa	0.24	no	Jelenia Góra	0.24	no	Jelenia Góra	0.24	no
8	Chorzów	0.21	no	Bogatynia	0.22	no	Bogatynia	0.23	yes	Sosnowiec	0.22	no	Zabrze	0.22	no
9	Jelenia Góra	0.21	no	Chorzów	0.21	no	Chorzów	0.22	no	Bogatynia	0.22	no	Sosnowiec	0.22	no
10	Zabrze	0.21	no	Sosnowiec	0.21	no	Świętochłowice	0.21	no	Chorzów	0.22	no	Chorzów	0.22	no
11	Zgorzelec	0.20	no	Świętochłowice	0.21	no	Sosnowiec	0.21	no	Zabrze	0.22	no	Legnica	0.21	no
12	Świdnica	0.20	no	Świdnica	0.21	no	Legnica	0.21	no	Legnica	0.22	no	Świdnica	0.21	no
13	Szczawno-Zdrój	0.20	no	Zabrze	0.21	no	Zabrze	0.21	no	Bytom	0.21	no	Bytom	0.21	no
14	Sosnowiec	0.20	no	Legnica	0.21	no	Świdnica	0.21	no	Świdnica	0.21	no	Szczawno-Zdrój	0.21	no
15	Siemianowice	0.20	no	Bytom	0.20	no	Bytom	0.21	no	Tychy	0.21	no	Bogatynia	0.21	no
16	Tychy	0.20	no	Wałbrzych	0.20	no	Wałbrzych	0.20	no	Wałbrzych	0.21	no	Wałbrzych	0.21	no
17	Wałbrzych	0.20	no	Szczawno-Zdrój	0.20	no	Szczawno-Zdrój	0.20	no	Ustroń	0.20	yes	Tychy	0.20	no
18	Chojnów	0.19	no	Szczyrk	0.20	yes	Tychy	0.20	no	Karpacz	0.20	yes	Głogów	0.20	no
19	Bytom	0.19	no	Tychy	0.20	no	Siemianowice	0.19	no	Siemianowice	0.20	no	Siemianowice	0.20	no
20	Świętochłowice	0.19	no	Zgorzelec	0.20	no	Karpacz	0.19	no	Świętochłowice	0.19	no	Świętochłowice	0.19	no
21	Legnica	0.19	no	Siemianowice	0.19	no	Ustroń	0.19	no	Szczawno-Zdrój	0.19	no	Ustroń	0.19	no
22	Karpacz	0.19	no	Karpacz	0.19	no	Szczyrk	0.19	no	Szczyrk	0.19	no	Karpacz	0.19	no
23	Ustroń	0.19	no	Ustroń	0.19	no	Polkowice	0.19	no	Głogów	0.18	no	Szczyrk	0.19	no
24	Szczyrk	0.19	no	Olszyna	0.19	yes	Głogów	0.18	no	Cieszyn	0.18	no	Cieszyn	0.19	no
25	Kłodzko	0.19	no	Głogów	0.18	no	Żukowice	0.18	no	Ruda Śląska	0.18	no	Ruda Śląska	0.18	no
26	Polkowice	0.18	no	Wista	0.18	no	Rybnik	0.18	no	Rybnik	0.18	no	Zgorzelec	0.18	no
27	Wista	0.18	no	Bolesławiec	0.18	no	Jerzmanowa	0.18	no	Bolesławiec	0.18	no	Bolesławiec	0.18	no
28	Czeladź	0.18	no	Cieszyn	0.18	no	Mysłowice	0.18	no	Zgorzelec	0.18	no	Mysłowice	0.18	no
29	Głogów	0.17	no	Rybnik	0.17	no	Zgorzelec	0.17	no	Polkowice	0.18	no	Rybnik	0.18	no
30	Bolesławiec	0.17	no	Polkowice	0.17	no	Bolesławiec	0.17	no	Mysłowice	0.18	no	Chojnów	0.17	no

Legend: m_i – value of development measure; H – hotel startups within the commune in a given year, n – number of hotels launched within the area of the analyzed communes in a given year.

Source: Own study based on the performed empirical research studies.

Table 4
2005–2009 Ranking of the 30 best municipalities with the most favorable conditions to establish integrated hotel chains.

No.	Year 2005 (n = 3)			Year 2006 (n = 2)			Year 2007 (n = 2)			Year 2008 (n = 1)			Year 2009 (n = 3)		
	Commune name	m _i	H	Commune name	m _i	H	Commune name	m _i	H	Commune name	m _i	H	Commune name	m _i	H
1	Wrocław	0.49	yes	Wrocław	0.43	no	Wrocław	0.52	yes	Wrocław	0.49	no	Wrocław	0.51	yes
2	Katowice	0.41	yes	Katowice	0.36	no	Katowice	0.41	no	Katowice	0.38	yes	Katowice	0.38	no
3	Opole	0.29	yes	Opole	0.26	no	Opole	0.29	no	Opole	0.29	no	Opole	0.29	no
4	Bielsko-Biała	0.29	no	Bielsko-Biała	0.26	yes	Bielsko-Biała	0.29	no	Bielsko-Biała	0.27	no	Bielsko-Biała	0.27	yes
5	Gliwice	0.27	no	Gliwice	0.24	no	Gliwice	0.26	no	Gliwice	0.24	no	Gliwice	0.26	no
6	Częstochowa	0.24	no	Kobierzyce	0.22	no	Częstochowa	0.25	no	Częstochowa	0.23	no	Częstochowa	0.24	no
7	Jelenia Góra	0.23	no	Bogatynia	0.22	no	Jelenia Góra	0.23	no	Jelenia Góra	0.21	no	Szczawno-Zdrój	0.22	yes
8	Zabrze	0.22	no	Osiecznica	0.22	no	Bogatynia	0.22	no	Bogatynia	0.21	no	Jelenia Góra	0.22	no
9	Legnica	0.21	no	Częstochowa	0.21	no	Szczawno-Zdrój	0.22	no	Polkowice	0.20	no	Chorzów	0.21	no
10	Bogatynia	0.21	no	Jelenia Góra	0.21	no	Zabrze	0.22	no	Chorzów	0.20	no	Sosnowiec	0.20	no
11	Sosnowiec	0.21	no	Chorzów	0.19	no	Chorzów	0.21	no	Zabrze	0.20	no	Zabrze	0.20	no
12	Chorzów	0.21	no	Zabrze	0.19	no	Sosnowiec	0.21	no	Legnica	0.20	no	Tychy	0.20	no
13	Bytom	0.20	no	Karpacz	0.19	no	Legnica	0.21	no	Sosnowiec	0.19	no	Świdnica	0.20	no
14	Tychy	0.20	no	Wista	0.19	yes	Świdnica	0.21	no	Świdnica	0.19	no	Bogatynia	0.20	no
15	Karpacz	0.20	no	Legnica	0.19	no	Tychy	0.20	no	Tychy	0.19	no	Legnica	0.20	no
16	Świdnica	0.20	no	Sosnowiec	0.18	no	Szczyrk	0.20	yes	Ruda Śląska	0.18	no	Karpacz	0.19	no
17	Siemianowice	0.19	no	Polkowice	0.18	no	Siemianowice	0.20	no	Siemianowice	0.18	no	Ustroń	0.19	no
18	Zgorzelec	0.19	no	Tychy	0.18	no	Bytom	0.20	no	Karpacz	0.18	no	Bytom	0.19	no
19	Wałbrzych	0.19	no	Szczawno-Zdrój	0.18	no	Cieszyn	0.19	no	Bytom	0.18	no	Siemianowice	0.19	no
20	Cieszyn	0.19	no	Ustroń	0.18	no	Karpacz	0.19	no	Szczyrk	0.18	no	Mysłowice	0.19	no
21	Ustroń	0.19	no	Bytom	0.18	no	Świętochłowice	0.18	no	Świętochłowice	0.18	no	Ruda Śląska	0.19	no
22	Szczawno-Zdrój	0.19	no	Świdnica	0.17	no	Ruda Śląska	0.18	no	Cieszyn	0.18	no	Cieszyn	0.18	no
23	Szczyrk	0.19	no	Ruda Śląska	0.17	no	Głogów	0.18	no	Głogów	0.17	no	Głogów	0.18	no
24	Bolesławiec	0.19	no	Siemianowice	0.17	no	Wałbrzych	0.18	no	Rybnik	0.17	no	Szczyrk	0.18	no
25	Głogów	0.19	no	Marklowice	0.17	no	Bolesławiec	0.18	no	Bolesławiec	0.17	no	Bolesławiec	0.18	no
26	Świętochłowice	0.18	no	Szczyrk	0.17	no	Zgorzelec	0.18	no	Olszyna	0.17	no	Świętochłowice	0.18	no
27	Ruda Śląska	0.18	no	Cieszyn	0.17	no	Ustroń	0.18	no	Szczawno-Zdrój	0.17	no	Zgorzelec	0.18	no
28	Dobrzeń Wielki	0.18	no	Rudna	0.17	no	Mysłowice	0.18	no	Ustroń	0.17	no	Polkowice	0.17	no
29	Rybnik	0.18	no	Dobrzeń Wielki	0.17	no	Rybnik	0.18	no	Wista	0.17	no	Rybnik	0.17	no
30	Polkowice	0.18	no	Wałbrzych	0.16	no	Lubin	0.17	no	Świerklany	0.17	no	Kobierzyce	0.17	no

Legend: m_i – value of development measure; H – hotel startups within the commune in a given year, n – number of hotels launched within the area of the analyzed communes in a given year.

Source: Own study based on the performed empirical research studies.

model also adequately predicts dependent variables, which is confirmed by the very high value of the Nagelkerke's R squared coefficient of determination, amounting to 0.94 (Table 2).

The logistic regression model presented in Table 2 shows that, among all the location factors taken into account in the study (Table 1), the statistically significant ones were: price of investment land, level of economic development, internationalization degree of the local economy, and urbanization. The probability of opening a new facility by a hotel chain within the analyzed communes increased over the years 2000–2009, as the following factors increased: per capita incomes of communes (the level of economic growth), number of business entities with foreign capital (the degree of internationalization of the economy) and population density (urbanization). On the other hand, the higher the prices for purchasing an investment land became in a given municipalities, the lower the chances of building a new chained-brand hotel.

All of the new chained-brand hotels were established within the territory of communes listed in the top thirty of the investment attractiveness index created based on location factors estimated in the logistic regression model. The most attractive communes for potential investors wishing to start up a new chained-brand hotel were: Wrocław (the value of development measure increased from the level of 0.43 in 2006 to 0.52 in 2007) and Katowice (the value of development measure rose from 0.36 in 2006 to 0.41 in the years 2003–2005 and 2007). In third place in the ranking was Opole, for which the value of development ranged from 0.26 in 2006 to 0.31 in 2003. In the period 2000–2009, six new chained-brand hotels were launched in Wrocław, in Katowice – four, while in Opole – two. Other integrated hotels were operating in Bielsko-Biała and Szczyrk (two in each place), as well as in Olszyna, Bogatynia, Ustroń, Karpacz, Wista, and in Szczawno-Zdrój (one in each place).

The results of research on factors concerning the location of chained-brand hotels correspond with results obtained by other researchers (e.g. Assaf et al., 2015; Canina et al., 2005; Kundu & Contractor, 1999; Luo & Yang, 2012; Novak et al., 2011; Ramon Rodríguez, 2002; Yang et al., 2012; Zhank et al., 2012). It turned out that key factors – similar to those listed by the authors of those studies – determining location of chained-brand hotels are: the level of economic development, the degree of internationalization of the economy and urbanization. This proves that hotel chains implement location strategies, both in developed markets (e.g., USA, UK, China or Spain), as well as in markets, which are not yet totally developed, where the number of hotels and accommodations per capita differs from international standards. Perfect examples here are the Central and Eastern Europe markets, including the Polish market.

In the context of the obtained results, a key finding is that in Poland since the end of the political transformation (that is, the year 2000 adopted in the study) most operating facilities – mainly chained-brand hotels – were business hotels. These are located mainly in large cities, and this explains the level of significance for potential investors of such location factors as: the level of economic growth, and the degrees of urbanization and internationalization.

A high level of economic development of a commune is usually a good predictor for the expected demand for hotel services (Aliouche & Schlenrich, 2011; Baum & Haveman, 1997; Kundu & Contractor, 1999; Shu & Dai, 2002). This applies to both tourist demand reported from guests staying overnight (tourists and business representatives), as well as to local demand reported by passing-by-visitors and night-out-users. The size of tourism demand is essential, both for hotels located in large cities, as well as for those located in holiday resorts. However, the role of local

demand may be crucial in the case of hotels offering an attractive range of services, which are located in places where the supply of such services is low or in the case of facilities offering services of the highest quality, despite their location. It seems, moreover, that the level of economic development correlates with stability, which is important especially for foreign investors, who are not so well acquainted with the realities of the Polish hotel market. In part, this is consistent with the common economic principal-agent theory (Braun & Guston, 2003; Guilding, Warnkenb, Ardillc, & Fredlined, 2005), mainly relating to the corporate governance concept, which presents the company as a network of contracts (trade agency) concluded between various stakeholders: management board, shareholders and business partners. Making the decision to enact indirect equity investment in a given country, in which we often deal with international hotel groups, is based in this case on the unwillingness of stakeholders to accept risk (Puciato, Łoś, & Mrozowicz, 2013). In the context of the presented theory, a favorable situation in terms of direct capital investment by hotel chains will certainly require a high level of stability, including economic stability (Alegre & Cladera, 2006; Assaf et al., 2015; Johnson & Vanetti, 2005).

Similar observations could also explain the significance of the degree of internationalization of the economy as a factor in the location of chained-brand hotels (Novak et al., 2011). Significant internationalization of a local economy allows hotel corporations to make optimistic estimations of future demand for services provided in a hotel run especially for foreign guests. Some guests (tourists, businesspeople, and migrants) prefer hotels owned by representatives of their home countries. Moreover, a high degree of internationalization also correlates positively with the level of economic stability, meaning that foreign companies that have invested their capital here before have estimated the level of investment risk as acceptable.

The significance of urbanization as a factor of chained-brand hotel location is probably derived from the fact that large aggregations of economic and social activities provide the possibility of using a wide range of services enabling or facilitating the conduct of economic activities. This applies to both technical and social infrastructure, as well as to a large and diverse labor force, a large and demanding market and easy access to the results of research and development studies. Furthermore, this is related with a broad range of facilities associated with a high degree of cooperation between and specialization of individuals, presence of efficient business service networks, good access to human resources with various skills, and high levels of innovation generated by competition within the industry. Similar conclusions were given in research by Vanetti Johnson (2005), and Egan et al. (2006).

In the context of the obtained results from the above research, it is also worth emphasizing that the level of economic development, the degrees of internationalization and urbanization are the factors which are strongly associated with the effects of agglomeration, and therefore, with certain external advantages for those hotels located in large cities (Luo & Yang, 2012; Yang & Fik, 2011; Yang et al., 2012). The activity of business centers, major companies or groups of companies, functioning of special economic zones and clusters, or science and technology parks can stimulate the demand for hotel services, particularly enabled by business guests (Bégin, 2000). This relates to both services provided for guests traveling individually, as well as to the hosting of business meetings, conferences and training sessions. Moreover, benefits from operating in the vicinity of other hotels or tourist businesses are an important area of the agglomeration effect. This is due to both the so-called production advantages associated with easier access to well qualified human resources and to suppliers of high quality goods and services, as well as to the so-called benefits of demand expressed by the possibility of

reducing the cost to potential guests of seeking a suitable hotel (transaction costs). Agglomeration-based benefits are particularly evident for tourism clusters for leisure hotels, and other types of clusters in the case of business hotels (Gardzińska, 2012; Kapczyński & Szromek, 2008; Meyer & Rab-Przybyłowicz, 2011). Moreover, such factors of location as accessibility and proximity to the demand stream seem to be significant in relation to the effects of agglomeration. These factors may be confirmed by the fact that most hotels located in the analyzed area during 2000–2009 were established in regional capitals, that is in Wrocław, Katowice and Opole.

However, as confirmed in the study, the significance of land prices for the analyzed hotels in the process of selecting locations has a slightly surprising result. In fact, it would appear that for international hotel groups with a strong capital that usually choose market orientation, this factor should not be so important. The cause for this phenomenon, in the author's opinion, can be influenced by two factors: the structure of the hotel market in Poland and the situation in the global economy. Considering the first factor, it should be kept in mind that among commercial entities establishing new facilities there were, besides the international hotel groups, also Polish hotel chains. Their strength is usually not so strongly based on capital, so some must implement the strategy of cost together with the market strategy. This is especially important for large cities, where the prices for investment land are high, and in which most of the hotels analyzed in the study are already located. It should also be noted that during some of the analyzed years (2007–2009), the condition of the global economy was rather unstable. The financial crisis and in consequence the economic crisis that affected many countries around the world, including the United States, Great Britain and France, the home-country for most of the hotel chains – meant that the investment plans of many hotel chains had to be revised. Potential direct capital engagement was determined by the need for carrying out detailed estimations of spending and conservative risk assessments.

The significance of production prices, including land, should also be underlined as a key factor for the process of selecting hotel locations; and this issue was confirmed by some previous research studies (Martorell et al., 2012; Ussi & Wei, 2011). It should also be mentioned here that hotel facilities, mostly very capital intensive, affect to a certain extent the development of such indicators as duration or the rate of return on capital that are significant for investors. Furthermore, this reason also confirms the significance of costs for representatives of international hotel groups. This is of particular importance in the case of limited supply, because it also impacts upon high prices of land in the centers of large cities or the most attractive locations for new tourist and business hotels.

5. Conclusion

The location of economic activity, as mentioned in the introduction, is of great importance for the development of hotel financial management. Two facilities providing a similar range of services at comparable quality levels, but located in two different places can generate different economic effects from their operation activities. In the situation where hotel location is the sole determinant of a clear degree of differentiation, it can be stated that the rent factor of a given location exists. This has to do with the opportunity cost of a choice, and thus the difference between the financial result of a hotel located in the best possible location and the financial result of an entity in the current location. This is especially important for hotel chains that offer their guests unified products and for which the choice of suitable location can be crucial. As demonstrated in this paper, of all the factors shown in Table 1, those relevant for the location selection process of chain hotels are those associated with possible effects of agglomeration.

Also, the assumed directions of correlation have been confirmed, since the probability of starting a new chain hotel increases with the increase in the economic development level, degree of economy internationalization, and urbanization; however, this decreases with increasing land prices. When comparing the results of research to the current situation in the Polish hotel industry market, it should be stated that the location factors that have proven to be important are accurate and still valid. This is evidenced by two conditions. Firstly, all the chain hotels launched in the period 2000–2009 in the provinces of Lower Silesia, Opole and Silesia are still operating, which confirms the accuracy of location decisions taken at the time. Secondly, however, in the cities that are most attractive for hotel investors, i.e. Wrocław, Katowice and Opole (Tables 3 and 4), in the period 2010–2014 a further 21 chain hotels were established, more than half of which belong to the same hotel chains which implemented their investments in the years 2000–2009. This demonstrates both that the location factors, which have proved to be significant in the studies, are still an important condition for the choice of location for the newly established hotels, and that the time span of the research was chosen properly. The significance of the results derived from the study seems to be large, in particular, due to the fact that when selecting places for hotel location such a phenomenon is commonly observed, which the author has defined as the development-based potential for decentralization of location. However, results of empirical studies indicate that the behavior of hotel groups searching for new and developing markets demonstrates a certain pattern for locating their hotels. Newly-built hotels that are part of the hotel system start by launching their hotels in the capitals of countries, and then, as their economy develops, they are successively spreading to regional capitals, and other major cities, as well as to medium-sized towns. This is confirmed by research results from such authors as Kim, Chen, and Jang (2006), as well as, Zhank et al. (2012).

In the light of these observations, it can be assumed that throughout the period of the economic development of Poland and other Central and Eastern European countries, during the stage of economic convergence, other large and medium-sized towns besides regional capitals become more and more significant for hotel chains. Some predictors of this phenomenon can already be seen in completed investments, and thus such towns as Bielsko-Biala, Gliwice, Częstochowa, Chorzów, Jelenia Góra, Zabrze, Sosnowiec, Legnica, Tychy or Wałbrzych are placed at the top in the ranking of investment attractiveness.

Where there are many communes of comparable size seeking investors willing to establish a new chained-brand hotel in the near vicinity, the system of incentives formed by local and regional authorities can gain in importance. The phenomenon of communes competing for potential tourists and also for potential investors, including hotels, locating their capital in the tourism infrastructure and thereby contributing to the improvement of the attractiveness and competitiveness of tourism reception areas has already been evidenced in other research works (Dziedzic, 1998; Medina-Muñoz & Medina-Muñoz, 2014; Panasiuk, 2013; Stankova, 2014). Therefore, based on the obtained results, an attempt can be made to formulate recommendations for local authorities seeking to increase the attractiveness of their communes for potential hotel investors, and these can be listed as follows:

1. Implementation of smart spatial policy, separation of land dedicated to tourism functions and assurance of an adequate supply of land for investments, including for hotel activities. Such policies can facilitate the process of the selection of a location by investors, and it can also have a certain impact on land prices.

2. Effect of policies implemented by local authorities should be aimed at creating a comprehensive product within the area of reception and should include incentives in the form of administrative and planning, informational and fiscal actions for potential hotel investors and also for other entities involved in the supply of catering, cultural and entertainment services, as well as, sports and recreational facilities.
3. Attracting foreign direct investments and, consequently, increasing the internationalization of local economies. This should also be associated with intensification of cooperation with foreign partner communes, and developing other forms of international partnerships, such as euro-regional cooperation.
4. Stimulating the development of local economies, including local tourism demand, and for towns – intensification of urbanization.

Results of the analysis of this research allows the identification of both the strengths and weaknesses of the study. One of the strengths of the project is the fourth-stage research, i.e. the characterization of location factors of newly established chained-brand hotels, their exploration and verification, and ranking development regarding ranking on the most attractive communes in terms of hotel investments. Such a methodological approach is still not so commonly applied. The model presented in the study and the ranking developed on this basis can also be employed in business practice, for example by potential investors or local governments of the reception areas. However, currently there can be observed a considerable interest in analyses of locations that may provide investors with better knowledge of the market, and thus, facilitate their decision making in terms of selecting locations. In turn, local authorities of reception areas could be interested in potential directions for improvement of municipalities investment attractiveness for chained-brand hotels, which could contribute to improvement in the competitiveness of spatial units they manage. The sole algorithm for building a ranking can also be applied for ordering other complex tourist phenomena, such as tourist attractiveness, and attractiveness for other entities of the tourism economy, for example, tourist attractions or quality of the offered hotel product. One of the weaknesses of the research is the spatial range of the study, i.e. only three voivodeships in Poland. Future research should also cover other regions in Poland and other countries at similar levels of economic development, with particular attention to Central and Eastern Europe. This is appropriate especially in the context of dynamic penetration of these markets by hotel chains. Expansion of the spatial range would enable verification of whether the model presented in this study is also correct in relation to other countries with a similar level of economic development or whether it needs to be modified depending on such characteristics as market size, cultural aspects, tourist attractiveness, etc. One constraint of the project should also be considered the relatively short time span, which in future research will be extended to subsequent years. In regard to Poland and other countries of Central and Eastern Europe, analysis of the period before 1990 is often impossible. This is mainly due to the different economic systems, which were executed in those countries (centrally planned economies), the consequences of which, among others, are: diverse management conditions, restricted possibility for entrepreneurship development, meagre amount of international hotel chains acting in contemporary markets and lack of statistical information from that period of time. A definite shortcoming of this research is also the fact that most of the hotels which formed part of this study are facilities providing services primarily focused on business guests. Therefore, further studies on location factors should also consider leisure, transit and spa hotels.

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