

# THE IMPACT OF COMPETITION AND SEGMENTATION OF DEMAND ON THE MARKET OF HOTEL SERVICES IN PRAGUE IN 2009-2012

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## Abstract

Abstract: This paper deals with the development of competition and segmentation of demand for hotel services in Prague and their impact on pricing in 2009-2012. It focuses on an analysis of the capacity of accommodation facilities and the number and length of overnight stays. The paper also analyzes the reaction of Prague hotels to changes in demand over the studied period and their impact on the competitive environment. The most important competitive factor became price, which was determined mainly based on the prices of competitors. Hotel companies therefore segment in some detail even the prices of services. Pricing structure is usually based on prices offered by the competition. One of the fundamental problems of pricing is the method of obtaining information about the market situation, especially on competitive prices. This paper therefore focuses on an analysis of the collection of information on prices and its utilization in the business strategies of business entities.

**Key words:** hotel services, market segmentation, pricing, competition

**JEL Code:** D22, D43, J30, L83

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## Introduction

Tourism generates a considerable part of the gross domestic product of the Czech Republic (2,7 % in years 2010-2013, ČSÚ 2014, 1), and the City of Prague constitutes the most important domestic tourist destination. The hotel services market in Prague, to a considerable extent, also determines the overall situation in the hotel industry throughout the country.

Development of the market environment is pivotal for determining the situation on the hotel services market. Here a crucial role is played by market segmentation on both the demand and

supply sides, which largely determine the behavior of individual entities on the market. The issue of market behavior on the hotel services market came to the fore in connection with a temporary decline in consumer interest in hotel services at the end of the last decade. The development of the industry was significantly marked by the reaction of prices for individual hotel services to this situation.

This paper is based on data on pricing and statistical data on the number and capacity of Prague accommodation facilities and their availability in the last decade, and tries to describe the response to changes in demand and their impact on the overall market situation during the economic crisis from 2009 to 2012.

## **1 Hotel services market in Prague**

To understand the evolution of the market of hotel services and the responses of those operating on the market, it is necessary to analyze the situation in a longer term context. The hotel services market has undergone major changes since the beginning of the 21st century, especially on the supply side. From the supply perspective, the number of accommodation facilities, their overall capacity, and their structure have been decisive for the development of the market. In recent years there has been a sharp increase in the number of accommodation facilities and the overall number of hotel rooms.

While there were 502 accommodation facilities with 68,379 beds in 30,986 rooms in the year 2000 in Prague, by 2012 there were 621 facilities with 80,925 beds in 37,996 rooms (ČSÚ, 2014, 3). This represents an overall increase of 23.7% in the number of accommodation facilities, 18.4% in the number of beds offered, and a 22.6% increase in the number of hotel rooms.

In recent years, a slight decrease has been observed in the number of accommodation facilities and their capacities. The maximum number of beds was reached in 2008, when there were 654 accommodation facilities with 82,809 beds in 38,013 rooms in Prague. In 2010, 82,559 beds in 630 accommodation facilities could be found (ČSÚ, 2014, 2).

The increase in the capacity of Prague accommodation facilities has not been uniform. While the number of accommodation establishments grew fastest at the beginning of the last decade (between 2000 and 2004, about 96 facilities, i.e. by 19.1%), the number of beds grew fastest in the second half of the decade. In doing so, the most significant growth was recorded

between 2007 and 2008, when the number of beds increased by 8,207, i.e. 11%. More information on the development of accommodation in Prague can be found in Table 1.

**Tab.1 Development of accommodation in Prague 2000-2012**

Year	Number of accommodation establishments	Number of rooms	Number of beds
2000	502	30 986	68 379
2001	527	31 717	68 854
2002	566	32 910	71 160
2003	594	32 592	70 824
2004	598	31 387	68 913
2005	597	30 355	66 351
2006	619	32 122	69 650
2007	654	34 371	74 602
2008	656	38 013	82 809
2009	653	38 646	83 132
2010	630	38 726	82 559
2011	622	36 969	77 972
2012	621	37 996	80 925

Source: [http://www.czso.cz/csu/redakce.nsf/i/cru\\_cr](http://www.czso.cz/csu/redakce.nsf/i/cru_cr) [2014-02-02]

The overview shows that while in the first half of the decade the number of accommodation facilities grew faster than the number of beds offered, the second half of the season experienced a rapidly growing number of beds and stagnation in the number of accommodation facilities. This is due to the opening of new big upscale hotels. The fastest growing was the number of four-star hotels, which can be linked to generally optimistic expectations of market development. The development of accommodation facilities in each category in Prague is given in Table 2.

**Tab.2 Development of accommodation facilities in each category in Prague**

Year	Hotels	Hotels*****	Hotels ****	Hotels ***	Hotels **	Hotels *	Other
2000	502	10	43	132	27	11	279
2001	527	12	54	133	30	8	290
2002	566	15	69	146	22	4	310
2003	594	17	77	149	22	5	324
2004	598	24	90	157	19	3	305
2005	597	26	89	147	17	2	316
2006	619	27	101	153	16	2	320
2007	654	31	127	180	15	2	299
2008	656	33	142	193	13	2	273
2009	653	37	163	193	12	2	246
2010	630	37	168	184	10	2	229
2011	622	39	174	186	9	2	212
2012	621	42	178	184	10	1	206

Source: [http://www.czso.cz/csu/redakce.nsf/i/cru\\_cr](http://www.czso.cz/csu/redakce.nsf/i/cru_cr) [2014-02-02]

The most important phenomenon is a sharp increase in the number of four and five star hotels throughout the period. This increase is a full 415%, whereas since 2009 hotels in the highest category make up the largest group within Prague accommodation facilities. Meanwhile, in 2012, Prague hotels formed the most significant part of the total accommodation facilities in these categories throughout the Czech Republic - a total of 40.3% (in 2000 it was 34.9%). The total capacity of four and five star hotels reached 51,000 beds, which accounted for nearly 63% of the total capacity of Prague accommodation facilities (ČSÚ, 2013).

Another interesting development was the demand for Prague accommodation. The interest from overnight guests in Prague during the period varied greatly, but generally it can be stated that there was an overall increase throughout the period. Between 2000 and 2012, the number of guests in Prague accommodation facilities increased by 206% (ČSÚ, 2014, 4).

Not even the protracted economic crisis at the end of the decade had a substantial influence on this situation. The only years when the number of guests declined were in the summer of 2002 (probably due mainly to the impact of floods) and 2009. Between 2008 and 2009, the number of guests in Prague accommodation facilities dropped by 240,644, representing 5.24%.

The ratio of domestic (residents) and foreign (non-residents) guests in Prague hotels in the studied period was relatively stable. Foreign guests accounted for almost 90% of customers Prague hotels (89% in 2000, 86% in 2012). A 5.8% decline was seen in foreign tourists between 2008 and 2009. In the same period, the number of all foreign tourists coming to the Czech Republic fell by 8.5% (ČSÚ, 2014, 4).

The trend in the number of overnight stays in Prague was also significant. Between 2000 and 2012 the number of overnight stays increased by 85.5%. Moreover, in the number of overnight stays there was a consistent share of foreign to domestic guests, which was close to 90% (in 2000 it was 87%, in 2012 already 90%). The decline in overnight stays between 2008 and 2009 reached 8%. The overall trend in the number of guests in accommodation facilities and the number of nights is shown in Table 3.

**Tab.3 Number of guests in accommodation facilities and the number of nights**

Year	Number of guests	Foreign	Domestic guests	Number of overnight stays	Foreign	Domestic guests
2000	2 619 395	2 319 272	300 123	7 333 182	6 377 035	956 147
2001	3 008 277	2 670 798	337 479	8 323 494	7 588 436	735 058
2002	2 534 126	2 231 683	302 443	7 024 756	6 291 405	733 351
2003	3 024 575	2 648 896	375 679	8 424 332	7 547 401	876 931
2004	3 863 894	3 470 211	393 683	10 666 404	9 796 565	869 839
2005	4 108 565	3 725 180	383 385	11 204 950	10 368 571	836 379
2006	4 142 538	3 702 116	440 422	11 277 671	10 319 827	957 844
2007	4 485 372	4 009 463	475 909	12 200 291	11 206 954	993 337
2008	4 587 483	4 051 137	536 346	12 174 591	11 070 652	1 103 939
2009	4 346 839	3 808 959	537 880	11 218 200	10 154 505	1 063 695
2010	4 743 373	4 116 867	626 506	12 121 133	10 947 878	1 173 255

<b>2011</b>	5 050 923	4 360 390	690 533	12 948 091	11 677 323	1 270 768
<b>2012</b>	5 394 283	4 680 746	713 537	13 601 964	12 282 810	1 319 154

Source: [http://www.czso.cz/csu/redakce.nsf/i/cru\\_cr](http://www.czso.cz/csu/redakce.nsf/i/cru_cr) [2014-02-02]

A comparison of the growth rate of the number of guests in Prague accommodation facilities and the number of overnight stays indicates that in the studied period the average number of overnight stays per customer decreased. In 2000, there was a total of 2.8 nights per guest accounted for. In 2012 the figure was only 2.5 nights. For foreign visitors, the number of overnight stays changed from 2.4 in 2000 to 2.3 in 2012.

## 2 Market segmentation

A characteristic feature of the market of hotel services is its considerable segmentation on both the supply and the demand side (Rondan-Cataluna&Rosa-Diaz , 2014). Segmentation of the supply side is perhaps best expressed by the categorization of accommodation facilities to different groups. Although this categorization does not always affect the price of the offer, it is a clearly defined criterion (IHG, 2011).

The situation is much more complicated on the demand side. There are no formal categories for demand (guests), except for the statistical differentiation of domestic and foreign guests (see above). Despite this, hotel companies still identify several basic groups of guests. For each hotel more or less the same divisions are used, although they may be labeled slightly differently. The basic division of the demand (guests) is into two basic sectors.

The first consists of individuals and small groups (fewer than 10 people). These customers arrange their own accommodation, currently primarily through the Internet or by direct contact with the reservations department. For Prague hotels (especially in the four and five star categories) this sector constitutes the largest volume of sales and the largest number of nights spent in hotels. This segment is further divided into sub-segments ("Corporate" - corporate customers, "Wholesale" - clients who use the services of wholesalers, "Package" - customers who order their own accommodation in the form of discounted packages and "Discount Airline Delay" - company employees and their family members).

The second basic sector of customers is accommodated based on group bookings. This sector is called "Group." Their accommodation is booked through a travel agent or event manager for congress tourism. Also, this sector is further divided into individual segments by hotels

('Meeting Group'- participants of meetings and conferences, and 'Leisure Group' groups demanding accommodation, in particular for relaxation and sightseeing).

Thus, a detailed segmentation of demand allows accommodation facilities to respond appropriately in the pricing of hotel services.

### **3 Pricing in the hotel services market**

The hotel services market is characterized by considerable product homogeneity. Hotels in the four and five star categories currently reveal a high standardization of services, so with the exception of location, the guest is barely able to distinguish the products being offered (Salo&Garriga&Rigall-I-Torrent&Vila&Fluvià, 2014). In this situation, price plays an essential role for the consumer's (guest's) decision (Adhikari&Basu&Raj, 2013). Hotel companies therefore segment in some detail even the prices of services offered in an attempt to respond to the segmented demand in this market (Barrows&Powers, 2008). In practice, it is therefore possible to identify several types of prices at individual companies (so called "Best Flexible Rate" - applied to customers without reservation, and any discounts, " 14 Day Advance Purchased " - requires a reservation at least fourteen days prior to arrival, "Group Rates " - the contract price for the group," Local Negotiated rate " - contract price for a period of one year, " Day Delegate rate " - the conference package).

When setting specific prices within each segment, season plays an important role. Within corporate revenue management, the year is subdivided into four main periods - "High Season" (occupancy at 95%), "Medium Season" (occupancy to 85%), "Low Season" (occupancy to 70%) and "Distress Season" (50%). A minimum price is then set in each seasonal range for the various types of prices. In 2011, the price difference between the "High Season" and "Distress Season" in the various categories of prices in Prague four and five star hotels fluctuated between 32% and 55%. The largest difference was observed in the "Group Rates", which fluctuated between 45% and 55% (Čížková, 2012, p. 42-44).

Segmentation of market prices of hotel services as well as the influence of season do not, however, in themselves say anything about the actual mechanism of determination of prices of hotel services by individual companies. In this area, the development of the market situation in the sector (see Chapter 1) and the homogeneous nature of the product offered in

the various segments of the supply are clearly shown. The result is a clear focus on the price set by the competition in the various market segments.

The competitive situation for Prague four and five star hotels, it is not clearly defined. All subjects in this category focus on the same segment of customers - especially businesspeople within congress tourism and families on holiday. Due to the significantly higher prices in the "Corporate" or MICE segments, competition among hotels in Prague has long focused on this group.

Although individual hotels have different capacities and are found in different locations in Prague, the final prices offered to the customers in each category are very similar. Generally, hotels try not to lower their prices below the minimum level set for the seasonal range. Pricing structure is usually based on prices offered by the competition. However, these prices are publicly available only in part (especially the "Best Flexible Rate"), while quotations for key segments of demand ("Corporate" MICE) are not publicly available. In practice, this leads to the exploration of competitive price quotes using "Competition Checks" (testing competing offers via overnight and use of hotel services) and various forms of Mystery Shopping.

#### **4 Reactions to market development 2009 to 2012**

The reaction of prices of Prague hotels to the temporary decrease in demand in 2009 was an interesting phenomenon. Due to the fact that the increase in the number of Prague accommodation facilities and their capacities peaked in this period (see Tables 1 and 2), the result was a rapid decrease in prices for most four-and five-star Prague hotels. The strong focus on the competition's prices greatly intensified this trend. In order to preserve a higher occupancy rate, individual hotels resorted to a sharp reduction in prices (below the expected reduction in the price of the competition). The sharp drop in prices in this period was particularly evident at the Prague Hilton, which tried to ensure at least a minimum viable occupancy in relation to its enormous capacity (788 rooms, or 1091 rooms along with Hilton Old Town). The pricing strategy of the Intercontinental represented a certain exception in the studied categories of Prague hotels. Although there was a partial reduction in prices, the drop was not as great as the other competing hotels (Čížková, 2012, p.49). The result, however, was a reduction in occupancy. The result of pricing strategies used in all cases, however, was a decline in gross operating profit.

Due to lower prices and consequently gross operating profit, there was a natural effort by hotels to increase savings on the cost side (Woodworth&Mandelbaum&McDade, 2014). In addition to partial savings measures (energy saving, more efficient technologies, recycling of raw materials), savings were realized especially in the area of personnel, and hotels laid off many employees (a decrease of 6.6 % between years 2009 and 2013, ČSÚ 2014, 5). Given that in most cases the fall in profits was not due to a significant decrease in hotel occupancy, but rather to a decline in prices because of the competition, reducing the number of employees necessarily lead to an intensification of work for the remaining workers (a significant increase overtime, etc.). The result then in many cases was a drop in the quality of services provided to guests (Chen, 2013, p. 158-160). This approach, however, persisted for most hotels in Prague even after overcoming the temporary drop in demand in 2012 and 2013.

## **Conclusion**

The development of the competitive environment of Prague hotels demonstrates the effects of the structure of supply and demand on the pricing and market behavior of individual accommodation facilities. A significant increase in the category four and five star hotels in the last decade has led to an overall increase in the capacity of Prague hotels. At the same time there was also a homogenization of products in this part of the supply. The most important competitive factor became price, which was determined mainly based on the prices of competitors. Considerable segmentation of market demand for hotel services has also led to segmentation of pricing. However, in an environment of rapid and largely unexpected decline in demand, this situation lead to a price war among hotels. In an effort to preserve hotel occupancy rates, prices were lowered to below the expected reduction in competitors' prices. The result was a drop in prices on par with lower category hotels. At the same time drastic measures were taken in an effort to offset the decline in operating profit by reducing costs. Austerity was most apparent in the area of personnel. Given that the decline in demand was only temporary, and since 2011 the number of overnight stays has risen above that of before the crisis in 2009, austerity measures have, in many cases, affected the quality of services provided. Pricing strategies and the response to the temporary decrease in demand can be assessed to some extent as excessive, and has resulted in distortions in the market.

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