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## **THE STUDY OF THE DYNAMIC SERIES OF FINANCIAL INDICATORS OF ENTERPRISES IN THE HOTEL SECTOR**

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### **ABSTRACT**

*The research presents the calculation of the main financial and economic performance indicators of the hotels on the basis of official statistics. The forecast threshold values of some statistics describing the state of the sector of collective accommodation facilities in the Russian Federation as a whole, as well as in the Nizhny Novgorod region in particular, are proposed. On the basis of comparison of indicators of the sector of collective placements of the Nizhny Novgorod region with the average Russian proposals on optimization of the number of placements and their financial and economic indicators are formulated.*

**Keywords :** *Collective placements, hotel accommodations, Financial and economic indicators, Descriptive statistics, Analysis of dynamic series*

### **INTRODUCTION**

The analysis of economic indicators of the activity of hotels show the situation in the market of hotel services. It is very important to understand what factors in an economic situation of hotel lead to receiving profit.

According to statistical data in Russia the number of officially registered collective placementst in Russia has increased more, than twice for the last 15 years. The main contribution was made by hotels - more, than three times. By more than two times also the number of rooms of the Russian hotels has grown (Nikolskaya, Titiyevskaya, 2017). And other specialized collective placements show smaller dynamics. They include such objects as rest houses; recreation facilities; campings; tourist centers; the public automobiles used as collective placements (tourist trains, cruise vessels, yachts).

The data of official russian statistics characterizing dynamics of the hotel market in general and also hotels and similar means of placement during 2010 - 2017 are presented in tables 1.1 and 1.2.

**Table 1.1. Key indicators of activity of collective placements**

	2010	2011	2012	2013	2015	2016	2017
Number of collective	12 585	13 062	14 019	14 583	20 135	20 534	25 291
including:							
hotels and similar means of placement	7 866	8 416	9 316	9 869	13 957	15 368	18 753
specialized means of placement	4 719	4 646	4 703	4 714	6 178	5 166	6 538
Number of rooms, thousand	555	560	586	600	771	795	884
including:							
hotels and similar means of placement	260	278	301	319	433	482	508
specialized means of placement	295	282	285	281	337	313	376
Number of places,thousand	1 264	1 294	1 345	1 387	1 763	1 848	2 168
including:							
hotels and similar means of placement	530	571	618	676	923	1 046	1 137
specialized means of placement	734	723	727	711	840	802	1 031
Number of spending the night,thousand	162 987	166 197	173 614	172 631	212 195	216 838	253 655
including:							
hotels and similar means of placement	60 425	67 271	73 492	76 880	100 156	115 175	135 905
specialized means of placement	102 562	98 926	100 122	95 751	112 039	101 663	117 750
The number of the placed persons,,thousand	34 747	37 399	41 065	42 635	49 284	54 448	61 623
including:							
hotels and similar means of placement	24 026	27 112	30 235	31 733	36 817	42 981	48 412
specialized means of placement	10 721	10 287	10 830	10 902	12 467	11 466	13 211

**Table 1.2. Hotels and similar collective placements in Russia**

	2010	2011	2012	2013	2014	2015	2016	2017
Number of hotels and similar means of placement – all	5 953	6 357	6 706	6 998	7 898	8 391	15 368	18 753
in them places, thousand	458	495	516	565	698	704	1 046	1 137
From the total number of hotels and similar means of placement:								
hotels	4 220	4 444	4 666	4 856	5 445	5 697	9 513	10 901
in them places,thousand	366	386	397	439	550	540	759	822
motels	99	123	132	138	155	167	281	381
in them places,thousand	3	6	4	6	7	7	9	12
hostels	507	500	484	495	492	535	928	1 406
in them places,thousand	38	40	45	45	41	43	54	105

First of all, the accelerating growth of number of the Russian means of placement from 2010th year attracts attention. Especially it is noticeable on the example of 2015 following the results of which the number of the means of placement recorded by Rosstat has increased almost by a third (+29,2%) or by 4,5 thousand.

The main gain for the last 15 years has fallen on hotels (+54%) whereas the volume of specialized means of placement from 2000 to 2013 fell, noticeable growth is noted only in 2015 (+26,7% by 2014).

### 2. 1. Operational indicators of activity of hotels

Consideration and the analysis of operational indicators of activity of hotels is relevant in modern economic conditions.

For assessment of hotel business there are following economic criteria:

- indicators of profitability of one number,
- total income from each occupied or available number,
- income on one guest or on one berth,
- gross operating profit on each room,
- indicators of profitability of the conference areas
- Food and Beverage (F&B), etc.

From the category of operational efficiency two indicators are the most often used:

The Revenue per available room (RevPAR)

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### The Gross operating profit per available room (GOPPar)

RevPAR calculator computes the revenue per available room, and is a performance metric in the hotel industry that is calculated by dividing a hotel's total guestroom revenue by the room count and the number of days in the period being measured (Dopson, Hayes, 2016).

In world practice this criterion of efficiency is used as base for definition and the analysis of quality of work of hotel and allows to keep track of effectiveness and effective management of the number of rooms. But “RevPAR, as traditionally measured, will not be an adequate measure of performance as it considers only the rooms portion of the hotel asset “(Kimes, 2011).

RevPAR indicates the performance of a hotel in terms of rooms inventory management and provides some general market trends. “Hoteliers aim to maximise RevPAR by means of an occupancy and average rate trade off. Rooms revenue makes up a large portion of total revenue”(Younes, Kett, 2003).

RevPar pays off on as follows:

$$\text{RevPar} = \text{Rooms Revenue} / \text{Rooms Available} \quad (1)$$

RoomRevenue - income from sale of the number of rooms;

RoomsAvailable - total of rooms in hotel.

$$\text{RevPAR} = \text{ADR} * \text{OR (Occ) \%} \quad (2)$$

ADR -average room rate in days;

OR or OCC - occupancy ratio.

For hotels, different in the sizes, revenue of the number of rooms can vary from 50 to 95% in the absence of, for example, proceeds from restaurant, SPA, event rooms, etc. RevPAR can be only reflection of a share of income from sale of numbers, at the same time doesn't consider other sources of income. But The indicator of RevPar will be better in hotels with the bigers number of rooms, than in small hotels.

GOPPar – the indicator reflecting profit on one number.

$$\text{GOPPar} = \text{GOP (Gross Operatng Profit)} / \text{Available Rooms} \quad (3)$$

GOP (Gross Operating Profit) – gross operating profit on one available number. The GOP pays off as a difference between total sales of the number of rooms, restaurants, cafe, other departments and the sum of a direct operating and other expenses. This indicator allows to reflect better profitability of hotel in general, and not just the number of rooms, therefore, overall performance of the management of departments and hotel in general.

GOPPar “is defined as total gross operating profit (GOP) per available room per day, where GOP is equal to total revenue less the total departmental and operating expenses” . GOPPAR offers an overall more robust performance measure, especially when comparing the financial performances of hotels with different sizes or in different markets (Younes, Kett, 2003).

GOPPar is a KPI that allows hotels to apply the laws of economics to a complete drill down of the process of Revenue Management (Cross, Higbie & Cross, 2009) and make adjustments not only on achieving the top line but aligning it with the bottom line as well. From an ownership perspective, GOPPAR allows you to see what the value of your asset is at any given time.

It is necessary to remember that larger hotels have big costs of the room service and hotels in general, however at redistribution on one number, it is much less expense, than at small hotels. Thus:

- the indicator can be used as the efficiency of use, main for assessment, and work of the number of rooms;
- GOPRar will be more correct to be used for assessment of profitability of hotel in general taking into account all departments bringing income.

## 2.2. RevPar, ADR and OCC hotels of Nizhny Novgorod

We will consider to the RevPar, ADR and OCC on the example of hotels and other locations of Nizhny Novgorod (statistical data are presented in tables and schedules).

**Table 2.1** Operational indicators hotels of Nizhny Novgorod in the first quarter 2018

Name of an indicator	January	February	March
ADR	3 272,54	3 216,06	2 571,35
RevPar	1 193,19	1 276,98	1 088,60
OCC	36%	40%	42%

**Table 2.2.** – ADR hotels of Nizhny Novgorod

	January	February	March
2018	3 272,54	3 216,06	2 571,35
2017	3 533,59	3 036,18	2 846,12
2018/2017	-261,05	179,88	-274,77
2018/2017 %	-7,39%	5,92%	-9,65%

**Table 2.3.** – RevPar hotels of Nizhny Novgorod

	January	February	March
2018	1 193,19	1 276,98	1 088,60
2017	1 161,56	1 292,02	1 196,55
2018/2017	31,63	-15,04	-107,95
2018/2017 %	2,72%	-1,16%	-9,02%

**Table 2.4.**-OCC hotels of Nizhny Novgorod

	January	February	March
2018	36,46%	39,71%	42,34%
2017	32,87%	42,55%	42,04%
<b>2018/2017</b>	<b>3,59%</b>	<b>-2,84%</b>	<b>0,30%</b>
2018/2017 %	10,92%	-6,67%	0,71%

The average tariff of sale of number (ADR) in the first quarter 2018 has decreased by 113 rubles, or 3,7%, and has made 2996 rubles. Loading of hotels of the city has made 39,5% that is 1,2% higher than result of last year. Against the background of such dynamics of indicators income on number, available to sale, has made 1183 rubles that is 2,55% lower than an indicator of the first quarter 2017.

### 2.3. The analysis of efficiency of activity of hotels 3 \*

The indicators of operational efficiency of hotels 3 \* are given in tables and on schedules below.

**Table 2.5.**- ADR hotels 3 \*

	January	February	March
2018	2 949,44	2 826,95	2 280,73
2017	2 778,37	2 563,30	2 452,71
2018/2017	171,07	263,65	-171,98
2018/2017 %	6,16%	10,29%	-7,01%

**Table 2.6** -RevPar hotels 3 \*

	January	February	March

2018	1 117,78	1 147,77	1 099,61
2017	965,98	1 138,90	1 092,87
2018/2017	151,80	8,87	6,74
2018/2017 %	15,71%	0,78%	0,62%

**Table 2.6 -OCC hotels 3 \***

	<i>January</i>	<i>February</i>	<i>March</i>
2018	37,90%	40,60%	48,21%
2017	34,77%	44,43%	44,56%
2018/2017	3,13%	-3,83%	3,65%
2018/2017 %	9,00%	-8,62%	8,19%

ADR of hotels 3 \* has shown positive dynamics for the first three months 2018 also has made 2650 rubles that is 2,5% higher than the corresponding values of previous year. Loading and income on number have also shown growth in the first quarter: loading has grown by 2,8% and has made 42,3%, and the indicator of RevPar has grown by 5,4% and has made 1121 rubles. In a segment of hotels of category 4 \* dynamics of all key operational indicators was negative: ADR has decreased by 12,4% and has made 3527 rubles; loading has decreased and has made 34,2% that is 1,5% lower than result of 2017; RevPAR has dropped by 13,7% and has made 1204 rub.

## CONCLUSION

The analysis of statistical data shows need of increase in value of the considered indicators, including due to reorganization (optimization) of a control system of the hotel enterprise.

The strategy submitting a complex of the decisions on placement of resources of the hotel enterprise and achievement of long-term competitive advantages made by management on target segments of the tourist market is necessary for achievement of target values of indicators of operational efficiency.

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Placement of resources in hotel business is the choice of the services and the markets offering the best opportunities for investment including four directions:

- the strategy of penetration on the tourist market – expansion a dolirynka, increase in intensity of the offer of hotel services;

- the strategy of development of services – modernization, expansion of the range, advance of new services;
- the strategy of development of the tourist market – expansion of sale of the existing services;
- the strategy of diversification – direct vertical and return integration, penetration into adjacent spheres of economic activity, penetration into new fields of activity (the principle of conglomerate which isn't connected with the market released by goods/service or mastered).

Management of hotel has to be directly involved in development of strategy, influencing, thus, rendering of services, development of the tourist market, development of the enterprise, absorption of competitors and creation of strategic alliances.

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