

Analysis of tourism seasonality: regional aspect

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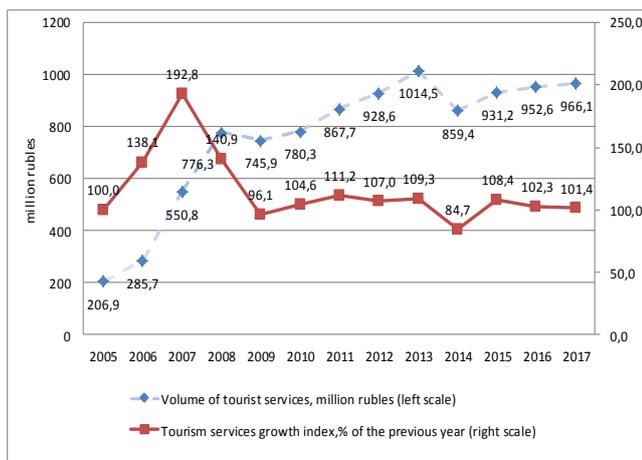
Abstract. *Effective management of the tourism industry requires a thorough analysis of such an important feature of the tourism market as seasonality. This is especially important for a country as large as the Russian Federation. Analysis of seasonality in tourism allows identifying the influence of natural and climatic conditions on tourist flows, calculating the duration of the tourist season, making more efficient use of tourist and recreational resources, determining the economic consequences of seasonality at the regional and organizational level, and developing a set of measures aimed at maximally smoothing seasonality.*

Key words: *tourist services, health-improvement services, accommodation facilities services, seasonality.*

I. INTRODUCTION

Altai Krai is one of the largest tourist regions of Russia. This is a unique geocultural region with world-class tourism resources, which therefore possesses a complex tourist image. One of the most important components of this image is the “territory of hospitality”, where guests of the region can feel not only the healing power of nature, but also experience new sensations and gain knowledge [1].

Figure 1. Dynamics of tourist services, including the



informal economy, millions of rubles (according to the Territorial Authority of the Federal State Statistic Service)

In the last decade, a marked increase in tourist activity has been observed in Altai Krai. According to the territorial authority of the Federal State Statistic Service of the Russian Federation, the volume of paid tourist services provided to the population increased from 15.5 million rubles in 2000 to 1014 million rubles in 2013 (Fig. 1), including the informal economy. However, after the fall of 2014 recovery was not completed. In 2017, the cost of tourist services provided was 966 million rubles. [2].

Stimulating the growth of the tourism sector and effectively managing its development requires a thorough analysis of such an important feature of the tourism market as seasonality, which is understood as a stable (from year to year), cyclical tourism activity characteristic of the place, associated with changes in the conditions of recreation. From an economic point of view, it represents repeated fluctuations in demand with alternating peaks and dips [3]. The study of seasonality in tourism allows not only to identify the influence of natural and climatic conditions on tourist flows and to establish the duration of the tourist season, but also to determine the economic consequences of seasonality at the regional and organizational level and to develop a set of measures to reduce seasonal unevenness in tourist services [4].

Seasonality in tourism has a significant impact on the profitability of all enterprises, as well as other industries connected with tourists. Seasonal decline causes a temporary release of labor [4]. It also influences the distribution of production costs, which is closely related to the price policy for goods and services for tourists, etc. The seasonality factor has a significant impact on the price of the services provided.

II. MATERIALS AND METHODS

A number of works are dedicated to seasonality in the tourist market. The most famous foreign study was conducted by T. Baum and S. Lundtorp [5]. An interesting study by R. Mitchell and M. Hall [6] on the influence of seasonality on the development of wine tourism in New Zealand and the possibilities of overcoming it, as well as the work of K. Karamustaf and S. Ulam [7], in which a comparative analysis of methods for studying seasonal fluctuations is carried out in tourism.

In Russian science, the seasonal development of the international tourism market is considered in the works of

A. Alexandrova [8,9]. The author identifies the main types of seasonal waves in international (outbound) tourism. The first type, with a summer peak in tourist demand and an autumn decline, is typical for countries with a temperate climate. In countries with a hot climate, two high seasons (in December-February and in July-August) and two low seasons (in May-June and September) are observed [8]. A. Alexandrova notes that as the tourism industry develops, seasonal waves are smoothed out by increasing the duration of the high season and increasing the number of arrivals in the off-season and low season. The author identifies the climatic, economic, social, and psychological factors as the main factors influencing tourist demand.

Currently, there are studies of seasonality in the tourism industry at the regional level. N. Shabalin, analyzing the current issues of the development of the Big Sochi resorts, highlights the pronounced seasonality as the main problem. The high season lasts from May to October. During this period, the occupancy rate of resorts is close to 100%, and in the low season resorts are closed [10].

K. Gubskaya and A. Zyrianov distinguish two high seasons for the Perm region. The first peak is connected with New Year's holidays in January. During this period, programs for skiing, equestrian, balneological tourism are in demand in the Perm region. The second peak occurs in the summer months, from the second half of June to August, when river rafts and cruises, car trips, and hiking routes are actively sold. The decline of tourism is typical for April and October. The authors note that climatic features play an important role in seasonality of tourism in the Perm region [11].

Seasonality in certain types of tourism is also considered. Tishukova N., based on the study of event tourism in St. Petersburg, notes the mismatch of high seasons of inbound and domestic tourism. Inbound tourism is characterized by a summer peak, and the highest activity of domestic tourism is registered from October to April, during school and student holidays [12]. The study was based on statistical data on the volume of tourism services provided to the population, taking into account the informal economy in the Altai Krai [2].

Altai region is one of the largest tourist regions of Russia [13]. A variety of natural complexes, unique healing resources, significant historical and cultural potential, and transport accessibility annually attract both Russian and foreign tourists to the region. In 2018, the tourist flow in the region was 2.2 million people. The Russians, who have chosen the Altai Krai as their vacation destination, are mostly residents of the Siberian Federal District, a significant part of which are residents of the Novosibirsk, Omsk, Tomsk, and Kemerovo Regions. The largest number of foreign visitors (about 80%) arrives in the region from the CIS countries.

The region is actively developing medical, recreational, rural, scientific, educational, extreme, event, and business tourism. Altai Krai is one of the five leaders in the number of persons accommodated in Russian health resorts. Over the past 10 years, event tourism has received significant development in the region. More than 10 cultural and gastronomic events gather thousands of guests from year to year. The Siberian Maslenitsa festival, the international

tourist forum VISIT ALTAI, the Flowering Maralnik and Altai Wintering holidays, dedicated to the opening of summer and winter tourist seasons in Altai, are known far beyond the region as well as the inter-regional festival of national cultures "Day of Russia on Turquoise Katun", the festival of drinks "AltaiFest", the festival "Shukshin days in Altai", the International Youth Forum, Siberian International forum on health and medical tourism, etc.

Currently, according to the Federal State Statistic Service, 986 tourism entities are operating in the Altai Krai and the Altai Republic. There are 286 accommodation facilities, 43 health resorts, about 190 rural guest houses, more than 160 camp sites and recreational facilities. In general, the number of places for simultaneous accommodation in the region is about 50 thousand, of which 20.7 thousand are year-round, including 8.8 thousand in health resorts. More than 220 organizations provide travel services in the region [2].

Tourism in the Altai Krai has become an independent sector of the economy, which generates a powerful multiplier effect on related business areas, increasing employment and living standards of the population of the region. Currently, the share of tourism in the gross product of the Altai Krai, taking into account the multiplier effect, is more than 6%. But one of the problems restraining further growth of the industry is the uneven demand throughout the year.

The concentration of demand over time can be estimated by various methods. In this work, the index method was used. Seasonality indices are calculated as a percentage of average monthly levels for a number of years to the total average monthly volume of services sold for the entire billing period:

$$I_s = y_i / \bar{y} * 100 \quad (1)$$

Note: I_s - seasonality index, y_i - the average monthly level, \bar{y} - the average monthly level for the entire series.

Based on statistical data on the volume of services provided in the tourism sector of the region, we have identified the main seasons. Typically, four seasons of tourist activity are distinguished: peak season - the most favorable period for organizing recreational activities, which is characterized by the maximum density of tourists and the most comfortable conditions for recreation. High season - the period of the greatest business activity in the tourist market, characterized by the highest tariffs on the tourist services. Low season is the season of decline in business activity in the tourist market, and the "dead" season is the period most unfavorable for recreational activities [14].

III. RESULTS AND DISCUSSION

The most significant effect on seasonality is exerted by the geographical, namely climatic, factor. In most cases, it is during the summer months, which are most favorable for recreational activities, that peak and high seasons are observed. Seasonality was studied on the example of three types of health-improvement, tourism, and accommodation services. The calculations show that there is a pronounced

seasonality in the provision of these services in the Altai Krai, but it has a different nature (Fig. 2).

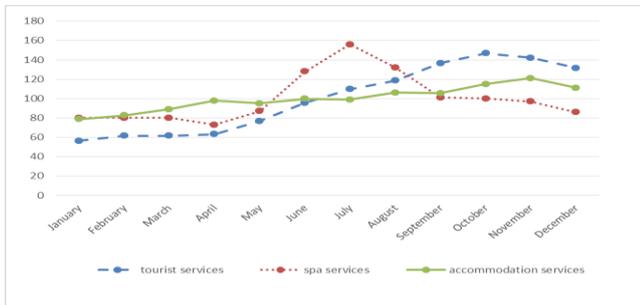


Figure 2 - Seasonality indices in certain sectors of the tourism industry of the Altai Krai

The provision of spa services begins to increase in the summer, and seasonal peaks of maximum demand are observed in July [15]. The seasonality index in the summer months exceeds 120%, reaching its maximum values in July (155%). The high season continues in early autumn, when the rate drops to 97%. Lower volumes of spa services are typical for the winter and spring months. The “dead” season, characterized by the lowest rates, is observed in April, when only 73% of services from the average annual level is sold (Fig. 2).

Selling tourism services also begins to increase in the summer, but seasonal peaks with maximum demand are observed in October-November [16]. The seasonality index in these months exceeds 140%. Lower sales are typical for the winter and spring months. The dead season in tourist services is observed in January, when the sales volume is less than 60% of the long-term average annual period.

The data obtained contradict the widespread concept of the summer period as a high season in tourism. In our opinion, this reflects the outbound character of Siberian tourism and indicates a high share of foreign tours in the sales structure of the region. This also shows the “transit nature” of the tourist flow in the Altai Krai, when a significant part of tourists travels to the region for recreation in the Altai Republic.

In the activity of accommodation facilities, a different nature of seasonality is traced. In general, seasonality is less pronounced in this industry. Demand and the volume of services rendered are more even throughout the year. The seasonality index varies from 80 to 120%. The high season begins in August, and the peak is observed in November. In winter, the lowest economic activity is observed.

IV. CONCLUSION

The Altai Krai tourism market is characterized by significant seasonal fluctuations, which indicate an insufficient level of its development. Although in the summer months the greatest flow of tourists is observed, in the volume of services rendered this is manifested only in health resorts. The greatest activity in the provision of tourist and accommodation services falls on the autumn months. However, seasonality in tourism is determined not

only by the influence of natural conditions, but also by socio-economic factors. First of all, this is the structure of consumption of goods and services, the availability of leisure time (public holidays, school and student vacations), business meetings, etc. In addition, the seasonality of demand also depends on the type of tourism. The most pronounced seasonality-related processes are manifested in beach and mountain-skiing destinations, and less pronounced in business and sightseeing tourism. The services themselves also affect seasonality. Seasonal fluctuations are less pronounced in the accommodation sector.

Since each type of tourism has a different nature of seasonality, their rational combination allows regulating tourism processes and effectively use the recreational opportunities of the region.

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