

## DEMAND AND OFFER IN BALNEARY TOURISM OF ROMANIA IN THE PERIOD 2010-2019

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### Abstract

*The paper aimed to analyze the demand and offer in Romania's balneary (spa) tourism in the decade 2010-2019 in order to identify the main trends and correlations and the aspects which have to be improved for increasing spa tourism contribution in the economy and to people's health and relaxation. The data provided by National Institute of Statistics were processed using usual methods for dynamic analysis, trend equation, regressions and correlations, and determination coefficient. In 2019, Romania's offer in spa tourism was represented by 37 balneary resorts, 620 units with reception function for tourist accommodation, and 35,643 places, while the demand consisted of 1.33 million tourist arrivals and 4.81 million overnight stays. All this figures represent much more than in 2010, except the number of places which declined by 2.3%. Romanian spa tourism keeps 7.1% of the number of tourist accommodation units, 10% of the number of places, 8.5% of tourist arrivals, and 16% overnight stays. A positive and strong connection was found between the number of tourist arrivals and overnight stays, but also an unbalanced ratio between overnight stays and number of places as well as between tourist arrivals and number of places. Therefore, balneary tourism has to be much more sustained to become a strong branch of Romania's tourism. A new strategy is required to better valorize the richness of natural resources, to continue investing in infrastructure, to diversify spa services, and to promote more intensively Romania's spa tourism abroad.*

**Key words:** balneary tourism, demand, offer, dynamics, trends, correlations, Romania

### INTRODUCTION

Tourism is one of the most dynamic branch of the global economy which assure jobs, receipt flows, and the development both directly, indirectly and induced, and creates bridges between continents, people, cultures, and civilizations [25, 37, 39].

Health tourism has become more and more important in the travel and hospitality industry, as people has a permanent need of health care, besides adopting a healthy stile of living and consuming a healthier food [7, 15, 19].

At present, about 5% of the EU-28 tourism belongs to health tourism whose contribution to the EU economy is 0.3% [6, 15].

Health tourism includes three forms of tourism: medical tourism, balneary tourism (spa tourism) and wellness tourism, but between them there is a close relationship and

interference due to the complexity of the measures and procedures needed to maintain humans' health [7, 15].

Spa tourism differs from medical tourism, because it is destined to prevent diseases and contribute to the rehabilitation of health status by less invasive procedures, based on the use of natural factors [5].

Balneary tourism has developed across the centuries starting from the antiquity as proved by the archeological excavations. Nowadays, balneary tourism has become more and more important in human life taking into account the high pressure of the stressing work, over-industrialized food, urban stressing civilization, and the ageing of the population. Therefore, it plays an important role in the recovery of our body energy, metabolism and physical condition, in keeping clear our mind and spirit, in maintaining health status, in

preventing the appearance of various diseases and treating the ill people [1, 12, 13].

The development of balneary tourism has been sustained by the progress in balneology, by the existence of a large range of natural resources such as springs of mineral waters for drinking and bathing, springs of thermal waters for baths and treatment, therapeutic and healing sludges and gases, salt mines, medicinal plants, climate factors etc with a benefic effect in various diseases and for improving humans' health, by the existence and continuous development of the balneary resorts where people could find a large diversity of facilities of accommodation in specialized balneary complexes and centers, endowed with adequate infrastructure for cure and treatment, specialized medical staff able to apply modern and effective procedures, and also catering, entertainment, sport and other activities to satisfy better tourists' desires [1, 5, 16, 18].

But we also must highlight the role of internet and e-commerce which has led to tourism globalization, and allowed tourists to chose their preferred cultural, historical, religious but also health, spa and wellness destinations, which are more intensively promoted eliminating the existence of distribution networks such as tour operators, travel agencies, etc. [4].

An important role in the development of spa tourism, and in tourism in general, it is the balance between demand and offer. Sometimes the demand is higher than the offer, but in case of spa tourism the existence of the natural sources exceeds the demand so that in this field it is still a box for improvement [8].

Balneary resorts are a more complex destination as besides accommodation, board, curative and treatment procedures, they could offer a pleasant ambiance for walks in fresh air, occasions to admire the beauty of wonderful landscapes, for visits to tourist attractions, cultural events, for recreation and rest [1, 40].

Besides the well known health destinations like United Kingdom, France, Germany, Italy, Spain, health tourism has also got a new orientation to the Central and Eastern

European countries such as: Hungary, Slovenia, Croatia, Czechia, Romania, Poland, Serbia which have become preferred destinations for the West Europeans [2, 6, 14, 26, 27, 28, 29].

Romania's tourism is in a continuous development as proved by the high growth rate of tourist arrivals. More and more visitors both Romanians and foreigners are interested to discover the treasures of the nature, historical and cultural heritage, and to have unforgettable memories about travels and hospitality in this country. Besides other economic branches, tourism plays an important role in Romania's economy contributing to employment and GDP [22, 23, 24, 31, 33].

Balneary tourism is an important branch of Romania's tourism, grace to the existence of a large variety of mineral and thermal waters, which account for 33% of Europe's reserves [3, 37].

Unfortunately, only 10% of springs is utilized, a reason to think that Romania has a high potential for developing balneary tourism at a higher level than at present.

From this point of view, Romania has a high competitive advantage compared to other countries, advantage which has to be used so that balneary tourism to increase its contribution to Romania's tourism industry and economy by creating jobs, assuring a continuous tourist and receipt flow across the year and, at the same time, helping the people to maintain the health [20, 21].

More than this, balneary tourism and tourism in general are aligned to the sustainable development which have to assure a balance between the social, economic and environmental aspects and the use of the actual natural resources [9, 10].

In this context, the paper aimed to analyze balneary tourism in Romania in its dynamics during the last decade, 2010-2019, regarding offer and demand, in order to identify the main trends and relationships, and also to estimate the role played by this form of tourism in the national tourism.

## MATERIALS AND METHODS

This study is based on literature review and also on statistical data collected from National Institute of Statistics for the period 2010-2019.

The main indicators studied within this research are the following ones:

- for tourism offer: the number of units offering balneary services and the number of places available in these units;
- for tourism demand: the number of tourist arrivals in units with balneary role, the number of overnight stays, and the average length of stay.

The methodology applied to process data includes usual modern techniques and procedures such as: fixed basis index, trend equations (linear, polinomial), regression equations, correlations and coefficient of determination.

The results obtained from this study were displayed in tables and illustrated in graphics, finally the right conclusions being drawn.

## RESULTS AND DISCUSSIONS

### Balneary resorts of Romania

Romania has a large variety of natural resources which are used in balneo-therapy, among which the most important ones being: mineral and thermal waters, salted lakes, salt mines, sludges and gases good for treatments, medicinal plants and climate factors, which should be better valorized.



Map.1. Romania's balneary resorts

Source: [36].

The net of balneary resorts reflects their distribution in Romania's territory, the most important resorts being: Felix Baths, Herculan Baths, Sovata, Tusnad, Vatra Dornei, Techirghiol, Mangalia, Calimanesti-Caciulata, Olanesti, Govora Baths etc. [2, 11, 34, 35].

The balneary resorts offer a large variety of facilities for various cure and treatment procedures for various diseases among which the most important are: "rheumatic, cardiovascular, respiratory, digestive, renal, gynecological, dermatological, neurological, endocrine, metabolic and nutritional diseases etc."

The balneary services are numerous and definitely of a high diversity and high quality due to the modern endowment and high professionalism staff. The main spa services offered in Romanian resorts are: "physiotherapy, electrotherapy, kinetic-therapy, hydro-therapy, thermo-therapy, aerosols, aero-heliotherapy, sulfurous and carbonated baths, medical gymnastics exercises, massage etc" [3].

### Balneary tourism offer

*The number of units with tourist reception function in the balneary resorts* has continuously increased in Romania, due to the higher and higher demand of balneary services.

In 2020, Romania had 620 units with role in tourist accommodation, by 60% more than in the year 2010. Besides the old units which have been restored and endowed with modern facilities and equipment, new other units have been built to better cover the requirements (Fig. 1).

The investments made in infrastructure, especially in the modernization of the balneary accommodation units and also in setting up new modern complexes and centers of cure and treatment, relaxation locations, thermal pools, aqua parks, and also the holiday vouchers have strengthen the desire of the people to apply for spending time for recovering their health in balneary resorts.

The share of the number of units with function for tourist reception in the balneary resorts in the total number of units with accommodation function in Romania's

tourism was 7.4% in the year 2010 and 7.1 % in the year 2020, reflecting a slight declining trend. The explain is the fact that the number

of accommodation units at the national level has a higher growth rate compared to the increase rate in balneary tourism.

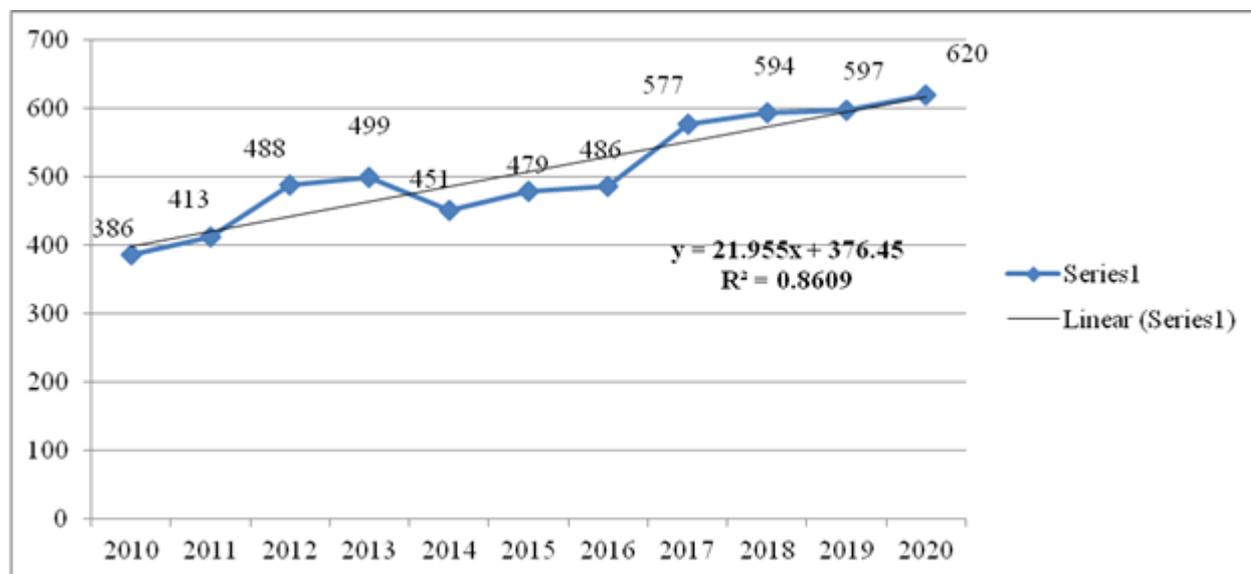


Fig. 1. Dynamics of the number of units with function of tourist reception in the balneary resorts, Romania, 2010-2020

Source: Own design based on the data from [17].

#### Accommodation capacity in balneary resorts

The number of places offered by the accommodation units in the balneary resorts has registered a variation from a year to another. In 2019, there were 35,643 places in the balneary resorts, by 2.9% less than in 2010. However, across the years, the number of places registered an increase from the year

2010 to the year 2013, when it reached a peak of 39,953 places. Then, it was noticed a deep decline to 33,576 places in the year 2014, by 16 % less than in the previous year. Since 2015, the number of places registered a continuous growth with a peak in the year 2017, accounting for 36,631 places and after this year it started to decline again (Fig. 2).

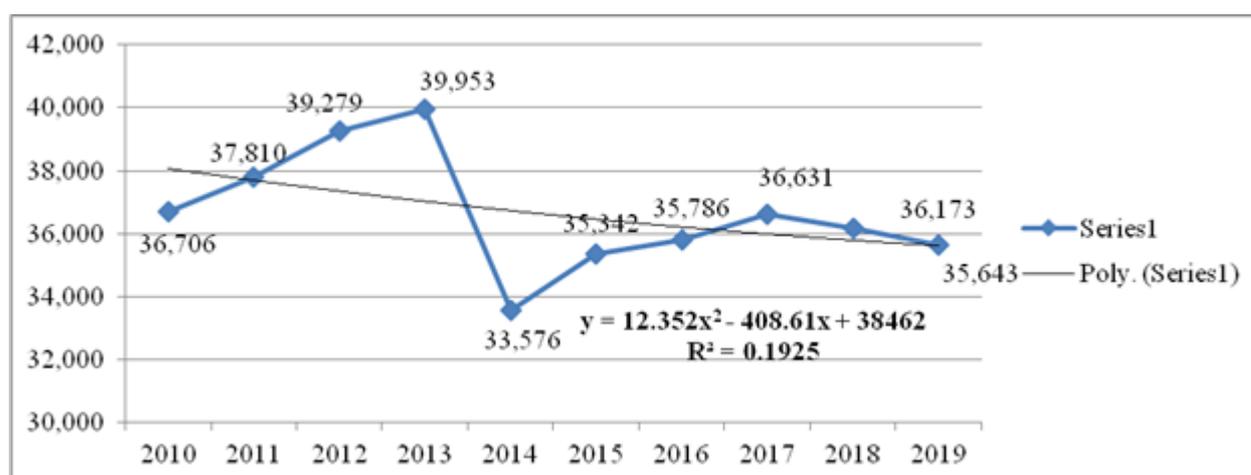


Fig. 2. Dynamics of the number of places in the units with function of tourist reception in the balneary resorts, Romania, 2010-2020

Source: Own design based on the data from [17].

The share of the number of places (beds) in the balneary tourism in the total number of

places existing in Romania's tourism recorded a decreasing trend from 11.8% in the year

2010 to 10% in 2019, because at the national level the number of places is increasing.

### Tourism demand in balneary resorts

#### *Number of tourist arrivals in the units with reception function*

In the analyzed interval, it was noticed a higher and higher number of tourists who are interested to arrive in balneary resorts for spending their time in an useful manner either

for cure or treatment, either for enjoying the thermal baths, or visiting the main tourist attractions, walking through the resorts and admiring the landscapes in the their surroundings.

In the year 2019, the balneary resorts registered 1,133,359 tourist arrivals, a figure almost double compared to the year 2010 (Fig. 3).

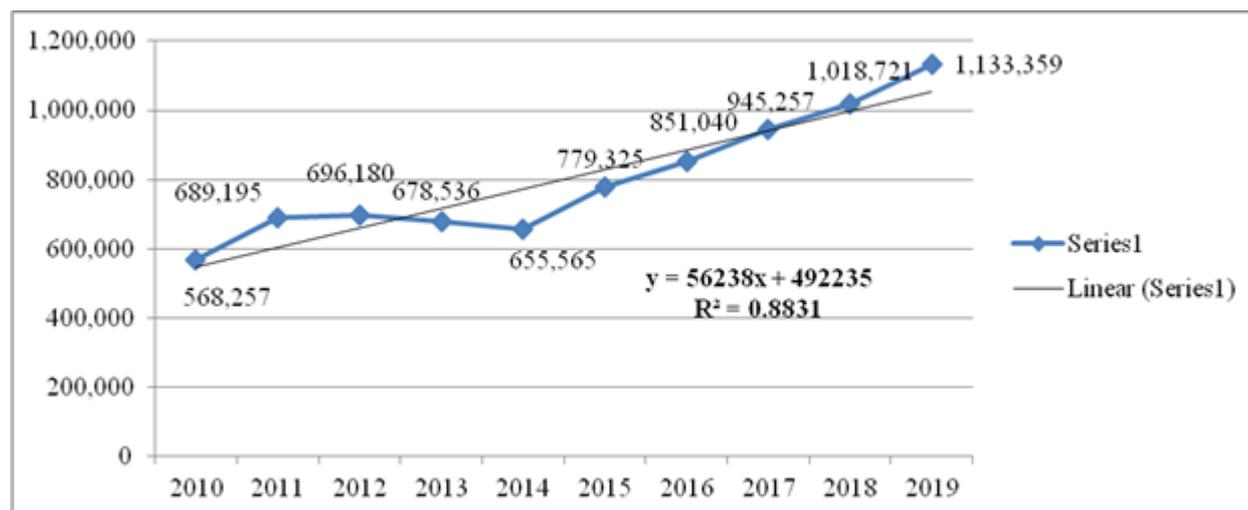


Fig. 3. Dynamics of tourist arrivals in the units with accommodation function in the balneary resorts, Romania, 2010-2019

Source: Own design based on the data from [17].

Taking into account the tourist arrivals in Romania's tourism, the share of the tourist arrivals in balneary resorts has registered a decline from 9.3% in 2010 to 8.5% in 2019, and this is due to the fact that the number of tourists arrivals at the country level has a higher growth rate.

Romanians are dominant in the number of tourists arrivals, with a share whose level has slightly increased from 96.1 % in 2010 to 96.9% in 2019.

Foreign tourists are not so many in Romania's balneary tourism, but their number it is possible to raise in the coming year because the cure and treatment services are of high quality and for sure the tourists are interested to enjoy visiting the country, to admire its beautiful scenery, tourist attractions, to discover history, folk traditions and gastronomy, to take part to cultural events.

Balneary tourist packages include in general high quality services regarding accommodation in the balneary centers, all

inclusive board facilities, a large range of cure and treatment programmes, to beneficiaries' satisfaction and that is why the number of tourists arrivals and overnight stays increased year by year.

The countries of origin for the foreign tourists are mainly Hungary, Republic of Moldova, Germany, Israel, Austria, France and Poland. Despite that the balneary services are of high quality in Romania, their are also cheaper than in other countries, which is another reason why foreign tourists apply for cure and treatment in the Romanian balneary centers.

#### *Number of overnight stays in the balneary resorts*

The number of overnight stays in the balneary resorts increased in the analyzed period by 22.88%, from 3,810,309 in the year 2010 to 4,805,188 stays in the year 2019 (Fig. 4).

The share of the number of overnight stays in balneary resorts in the total number of overnight stays in Romania's tourism has

registered a decline from 24.4% in 2010 to 16% in the year 2019.

The share of the Romanians in the total number of overnight stays in the balneary

resorts is 97.6% a little bit lower than 97.7% in the year 2010. But the figures reflects that the stays of the Romanians are dominant.

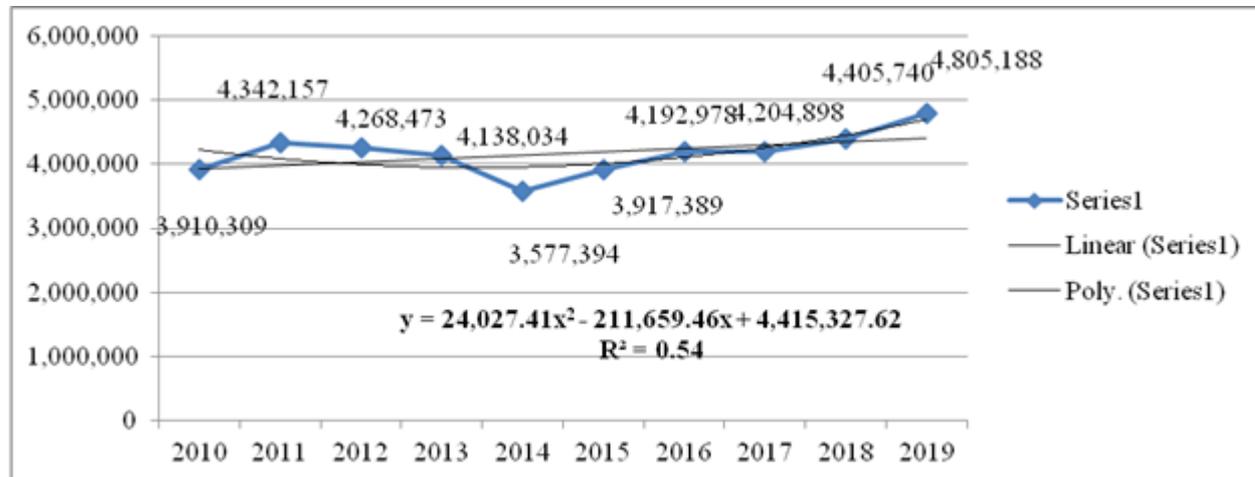


Fig. 4. Dynamics of overnight stays in the units with accommodation function in the balneary resorts, Romania, 2010-2019

Source: Own design based on the data from [17].

**Average length of stay in the balneary resorts** has followed a decreasing trend from 6.9 days in the year 2010 to 4.3 days in the

year 2019, meaning by 37.7 % less than in the first year of the analyzed interval (Fig. 5).

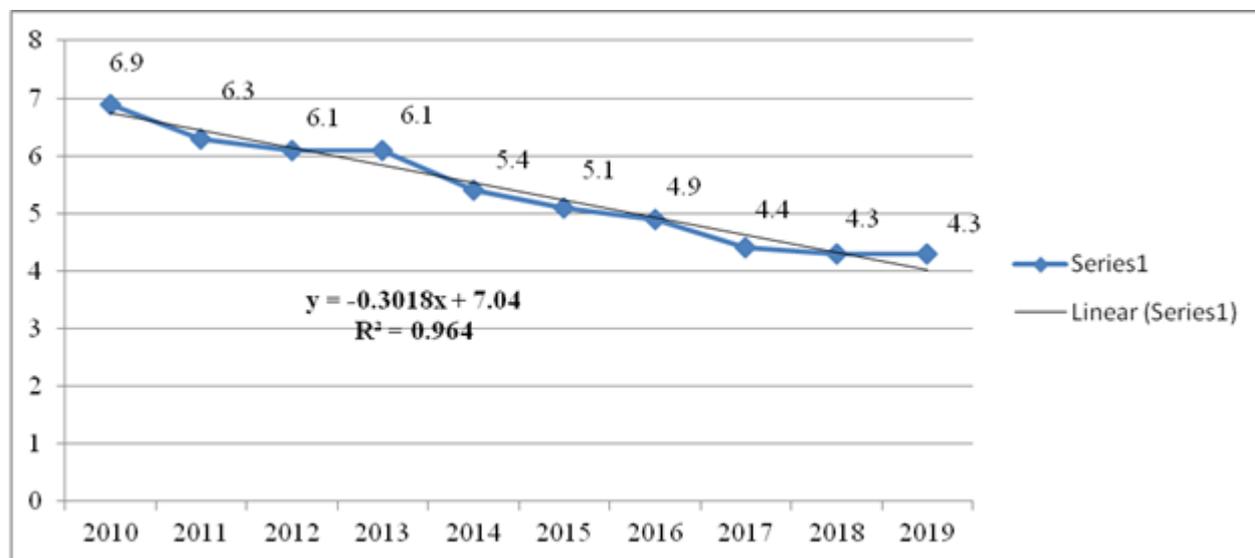


Fig. 5. Dynamics of average length of stay in the units with accommodation function in the balneary resorts, Romania, 2010-2019

Source: Own design based on the data from [17].

**Demand/Offer ratio in balneary tourism**

*The regression of overnight stays depending on tourists' arrivals* is presented in Fig. 6. The regression equation,  $Y = 1.34x + 3,104,553.33$  shows that for an increase of 1,000 tourists arrivals the accommodation demand in terms of overnight stays will go up by 1,340. Taking into

account the t value and the significance threshold P-value, this coefficient is statistically significant.

The value of the determination coefficient,  $R^2 = 0.54$ , is a positive and moderate strong, reflecting a good relationship between these two indicators (Fig. 6).

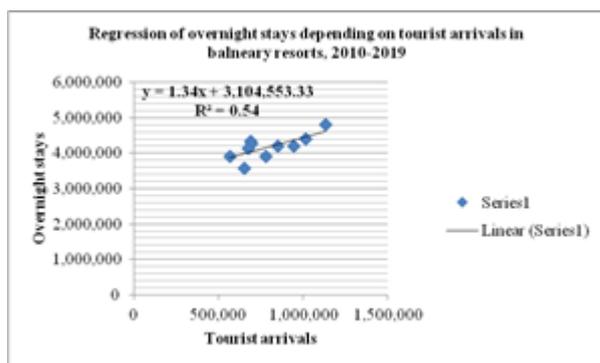


Fig. 6. Regression of overnight stays depending on tourist arrivals in the units with accommodation function in the balneary resorts, Romania, 2010-2019  
Source: Own design based on the data from [17].

**The regression of overnight stays depending on the accommodation capacity in operation in terms of places** is presented in Fig. 7. In this case, the regression equation,  $Y = 53.10x + 2,227,839.09$  reflects that for increase of the accommodation offer by 1,000 places, the overnight stays will determine increase by 53,100. The coefficient of determination  $R^2 = 0.09$  reflects that only 9 % of the variation of overnight stays will be determined by the variation of the number of places (Fig. 7).

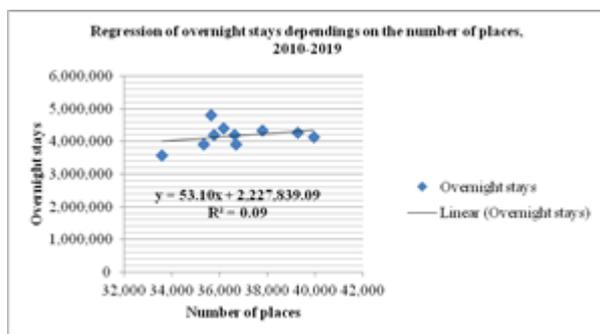


Fig. 7. Regression of overnight stays depending on tourist arrivals in the units with accommodation function in the balneary resorts, Romania, 2010-2019  
Source: Own design based on the data from [17].

**The regression of the number of beds depending on tourists' arrivals** is presented in Fig. 8. The regression equation,  $Y = -0.028x + 38,947$  shows that if tourist arrivals will increase by 1,000, the accommodation capacity will decline by 28 places, which confirms that between accommodation capacity in terms of places and the tourist arrivals is not a balanced ratio.

The coefficient of determination,  $R^2 = 0.0725$  reflects that just 7.25 % of the variation of the accommodation capacity in terms of places is a result of the variation in the number of tourists' arrivals (Fig. 8).

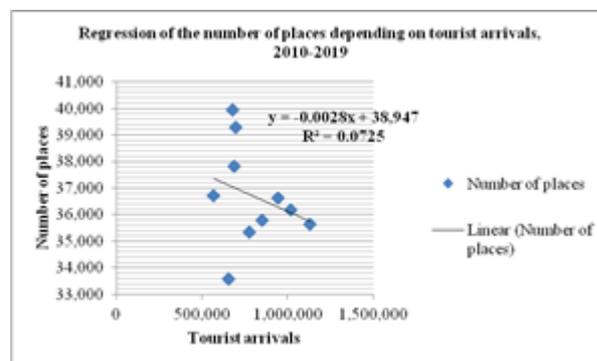


Fig. 8. Regression of the number of places depending on tourist arrivals in the units with accommodation function in the balneary resorts, Romania, 2010-2019  
Source: Own design based on the data from [17].

The discrepancy between demand and offer in balneary tourism is not singular in Romania's tourism, because it was also noticed in the seaside tourism at the Black Sea and in other tourism forms [8, 30, 32, 34, 38].

**How rural areas could support balneary tourism in Romania? The case of Persani Commune and Persani Baths, Brasov County.**

Rural areas could offer opportunities for the development of balneary tourism in the benefit of the local communities.

A notorious example is given by Persani Baths, situated in the proximity of Persani Commune on the road which links Brasov and Fagaras cities.

Here, the rich treasure of the baths is the existence of namol care are proprietati la fel de valoroase cu cel de la Techirghiol, Constanta County. Acest namol este indicat pentru cura persoanelor care au afectiuni ale aparatului locomotor de natura reumatica, care necesita relaxare musculo-articulara si tratament de curatire si tonifiere a epidermei! Persani Baths are in fact a small balneary resort care ofera bai cu ape sarate, ce provin din izvoare naturale sarate, ape clorurate, bicarbonate, sodice, si hipotone. Infrastructura bailor permite aductiunea acostor ape in bazinele statiunii.

Aceste bai s-a modernizat in ultimii ani devenind un adevart complex care ofera si alte facilitati cum ar fi: cazare, restaurant, bar, terase, camping. Capacitatea de cazare este relativ modesta constand din 5 camere complet utilate, 21 casute de lemn cu 2 si 4 locuri, dar s-a dezvoltat foarte mult in ultimii ani fiind o sansa pentru dezvoltarea turismului balnear de week-end.

## CONCLUSIONS

Balneary tourism is continuously developing in Romania being an important branch of the national tourism.

In 2019 compared to 2010, Romania has 37 balneary resorts, 620 units with reception function for tourist accommodation by +60% more, 35,643 places but by -2.9% less, 1.33 million tourist arrivals meaning 2 times more, 4.81 million overnight stays by + 22.9% more.

In Romania's tourism, spa tourism keeps 7.1% of the number of tourist accommodation units, 10% of the number of places, 8.5% of tourist arrivals, and 16% overnight stays.

Also, the results proved that it is a close and positive relationship between number of tourist arrivals and overnight stays, but an unbalanced ratio between overnight stays and number of places as well as between tourist arrivals and number of places.

Therefore, balneary tourism has to be much more sustained to become a strong branch of Romania's tourism as long as it could contribute to the development of sustainability in the field.

The tourism authorities should develop new strategies which have to valorize much better the richness of natural resources existing in the country, to continue to invest in infrastructure, to diversify balneary offer, to promote more intensively Romania's spa tourism abroad

The main strategical directions to whom the authorities with responsibilities in the field of tourism development must to pay attention are:

(i)the improvement and modernization of infrastructure in the balneary resorts,

complexes and centers by investments in new and hightech equipment;

(ii)a better marketing meaning: the identification of foreign markets which could supply potential tourists in balneary resorts, the promotion of Romania's spa resources and high quality services, setting up complete balneary touristic packages including both spa and health care services, tours to touristic attractions, air tickets, tickets to museums etc;

(iii)the increase the quality of spa services and assure the best ratio between service quality and price;

(iv)to increase the number of medical staff specialized on balneology.

Romania has a competitive advantage compared to other countries due to its large variety of natural resources which is an opportunity and a niche which could bring more tourists in the country to have contact and appreciate the achievements in the field of balneology, but also the beautiful landscapes, cultural and historical treasures, traditions and people hospitality.

Romania's spa tourism must offer high quality services, fitting the international standards and certifications, assuring a corresponding management of the balneary units and the patient security and safety as well as an efficient marketing.

The increased tourist flows will sustain tourism receipts which could improve the payment balance and supply financial resources to the private units to continue their development.

## REFERENCES

- [1]Aluculesei, A.-C., 2015, Spa Tourism – A Comparative Analysis On Spain And Romania, *Balneo Research Journal*, Vol.6(3), 199-207.
- [2]Astefanoaiei, R., Surugiu, C., Cristea, A., Surugiu, M., Mazilescu, R., Romania spa tourism: growth, tourism patterns, perspectives, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.20(2), 19-27.
- [3]Csoka, G. E., 2018, Balneal tourism and its importance for Romania, *Annals of the University of Oradea, Economic Sciences*, Tom XXVII, 2018, No.1., pp.65-72.
- [4]Dorobantu, D. M., Marcuta, A., Marcuta, L., 2019, Globalization and tourism. Case study-Romania, *Scientific Papers Series Management, Economic*

- Engineering in Agriculture and Rural Development, Vol.19(3), 197-202.
- [5]Erdeli, G., Dinca, A.I., Gheorghilas, A., Surugiu, C., 2011, Romanian spa tourism: A communist paradigm in a post communist era, *Human Geographies-Journal of Studies and Research in Human Geography*, 5 (2),41-56.
- [6]Fink, R, 2018, Health tourism in the EU: Facts and figures, <https://pro.regiondo.com/health-tourism-eu/>, Accessed on Dec.17, 2020.
- [7]Hall, C. M., 2013, *Medical Tourism, The Ethics, Regulations and Marketing of Health Mobility*, Routledge, Taylor & Francis Group, London.
- [8]Hontus, A.C., 2014, Analysis of tourism demand and supply - One of the essential elements of an area in tourism planning, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.11(1), 147-152.
- [9]Honțuș A.C., 2015a, Sustainable tourism development - important component of spatial touristic planning, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.15(1), 211-218.
- [10]Honțuș, A.C., 2015b, Determination of strategies of sustainable development and planning in tourist travel, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.15(1), 203-210.
- [11]Honțuș, A.C., 2013, Analysis development and planning the tourist resort Herculanu to promote tourism in this area, *Agricultural Management, Series I*, Vol. XV(4), 1-10.
- [12]Ilie, F.L., Tigu, G., 2017, Balneary tourism face to face with medical tourism- A comparative exploratory research, *Romanian Economic and Business Review*, Romanian American University, Vol. 12(4), 72-81.
- [13]Iordache, C., Sîrbu, A., Ciocină, I., 2016, Coordinates of developing the balneary tourism, *Management Strategies Journal*, Constantin Brancoveanu University, Vol.31(1),.308-316.
- [14]Lubowiecki-Vikuk, A., Kurkowiak, J., 2017, Medical tourism potential of Central and Eastern Europe: Attempt at classification, *CBU Conference Proceeding* 5:286.
- [15]Mainil, T., Eijgelaar, e., Klijs, J., Nawijn, J., Peeters, P., 2017, Health tourism in the EU- a general investigation, <https://research4committees.blog/2017/06/15/health-tourism-in-the-eu-a-general-investigation/>, Accessed on Dec.17, 2020.
- [16]Medlik, S., 2003, *Dictionary of travel, tourism and hospitality*, 3rd edition. Elsevier Science, Kent. [https://archive.org/stream/DictionaryOfTravelTourismHospitality/Dictionary%20of%20Travel%2C%20Tourism%2C%20%26%20Hospitality\\_djvu.txt](https://archive.org/stream/DictionaryOfTravelTourismHospitality/Dictionary%20of%20Travel%2C%20Tourism%2C%20%26%20Hospitality_djvu.txt), Accessed on Dec.17, 2020.
- [17]National Institute of Statistics, 2020, Tempo online, Tourism
- [18]Nedelea, A., Năstase, C., Kouroupi – Kelgiannaki, G., 2017, Tourism potential and marketing strategies in Romanian hospitality industry, *Journal of Tourism Research*, Vol. 2., <https://jotr.eu/index.php/volume2/17-tourism-potential-and-marketing-strategies-in-romanian-hospitality-industry>, Accessed on Dec.17, 2020.
- [19]Popescu, A., 2015a, Medical tourism, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.15(3), 241-251.
- [20]Popescu, A., 2015b, Some considerations on the actual statement of the world trade in commercial services, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.15(4), 257-264.
- [21]Popescu, A., 2016a, Research on the economic efficiency of Romania's tourism, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.16(1), 411-416.
- [22]Popescu, A., 2016b, Research on the concentration of tourist arrivals in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.16(1)2016, p.425-430
- [23]Popescu, A., 2016c, Research on the dynamics and territorial dispersion of the occupied population in Romania's tourism in the period 2007-2015, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.16(4)2016, p.279-288
- [24]Popescu, A., 2016d, Correlation between tourism accommodation capacity and tourist flow by micro region of development in Romania, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.16(4)2016, p.289-298
- [25]Popescu, A., 2016e, The correlation between international tourist arrivals and tourism receipts - a key factor of tourism efficiency, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.16(4)2016, p.299-306
- [26]Popescu, A., 2017, Trends in tourism demand in the top visited European countries, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol.17(4), 243-254.
- [27]Popescu, A., 2018, Analysis of Tourism Trends in the New EU Member States, *Proceedings of 32nd IBIMA International Conference on Vision 2020: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage*, Sevilla Spain, Nov. 15-16, 2018, pp.4330-4346.
- [28]Popescu, A., 2019a, Trends and correlations between accommodation capacity and tourist flows in the EU-28 top 10 tourist destinations in the period 2008-2017, *Proceedings of 33rd IBIMA International Conference on Vision 2020: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage*, Granada, Spain, April 10-11, 2019, pp.1253-1270.

- [29]Popescu, A., 2019b, Tourism and Travel Competitiveness in the European Union new member states, Proceedings of 33rd IBIMA International Conference on Vision 2020: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage, Granada, Spain, April 10-11, 2019, pp.3316-3333.
- [30]Popescu, A., Plesoianu, D., 2017a, Analysis of accommodation demand/offer in Romania's tourism, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol.17(3), 339-346.
- [31]Popescu, A., Plesoianu, D., 2017b, An Econometric Analysis between Tourism Income and Romania's GDP, Proceedings of the 30th IBIMA International Conference, Madrid, November 8-9, 2017, pp.459-485.
- [32]Popescu, A., Plesoianu, D., 2019, Discrepancies between the demand and offer on the seaside tourism of Romania, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol.19(1), 409-420.
- [33]Popescu, A., Hontus, A., Caratus Stanciu, M., 2020, Trends and changes in tourist flow in Romania in the period 2009-2018, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 20(1), 425-436.
- [34]Popescu, A., Marcuta, A., Marcuta, L., Tindeche, C., Hontus, A., Plesoianu, D., 2020, Romania's tourism trends and characteristics on the seaside resorts of the Black Sea in the period 2010-2019, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol.20(4), 417-430.
- [35]Popsa, R. E., 2012, Balneary tourism in Romania-Trends and perspectives, Quaestus Multidisciplinary Research Journal, 176-183, <https://www.quaestus.ro/en/wp-content/uploads/2012/02/popsa.pdf>, Accessed on Dec. 17, 2020.
- [36]Romania's map of balneary resorts, <https://haarkleurenfotos.blogspot.com/2018/04/statiuni-balneare-romania-harta.html>, Accessed on Dec.17, 2020.
- [37]Snak, O., Baron, O., Neacsu, N., 2001, Tourism Economy, Expert Publishing House, Bucharest, pp.34.
- [38]Tindeche, C., Marcuta, A.G., Marcuta, L., Muscanescu, A., 2014, Tourist flows analyzed at the level of tourist accommodation facilities, Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Agriculture, Vol.71(1), 113-117.
- [39]Tindeche, C., Marcuta, A.G., Hontus, A.C., 2018, Evolution of tourism in the world and national context, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol.18(1), 493-499.
- [40]Weisz, G., 2011, Historical reflections on medical travel. Anthropology & Medicine, 18(1), 137-144.
- [41]\*\*Persani Baths, [www.bailepersani.ro](http://www.bailepersani.ro), Accessed on Dec. 10, 2020.