

Innovative Incentives of the Tourism Industry in the Period of Post-Conflict Reconstruction of Ukraine

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Abstract: A relevance of the study is that the matrix of the post-conflict recovery of the tourism industry was built by the group of donor entities and aggressor entities that have a positive and negative impact on the settlement of dangerous situations in the state with changes in the priority of implementing the scale of innovative measures. The purpose of the article is to examine the innovative incentives of the tourism industry in the period of post-conflict reconstruction of Ukraine. A methodical approach to the assessment of the priority incentives of the tourism sphere during the post-conflict reconstruction of the state was developed and presented. It is established that the recovery of the tourism industry is determined by the scale of losses, the level of financial and investment potential of the state and its donors, as well as the levers of regulation of innovation potential. The main condition for the existence of an innovatively oriented tourism system in the country's regions is the innovative potential. The innovative potential is precisely the factor that gives impetus to the choice and implementation of innovations in the tourism industry. The forecast rate of growth of the volume of investment costs for the research of scientific and modernized developments in the tourism industry by organizations of the entrepreneurial, public sector, as well as the sphere of higher education is determined.

Keywords: Innovative Potential; Tourist Enterprises; Tourist Brand; Expenses; Profitability.

JEL Codes: R53, G32, M21.

1. INTRODUCTION

At the moment, the tourism sector faces dramatic losses and problems. To a greater extent, they are caused by subjective factors related to the geopolitical situation in the world. In addition, there is an increase in morbidity, which provokes sharp negative changes in the ecological environment. As a result, there is a decrease in the dynamism of tourist routes and tours, which in turn is reflected in the economy of the countries. In addition, the emergence of a military conflict in the recent history of mankind testifies to the impossibility of its full and quick settlement, despite significant progress in solving acute social problems. Today, the procedure for conducting military operations has changed, which is inextricably linked with measures of economic, informational,

social and political influence. This requires new approaches to the development in the period of post-conflict restoration of innovative incentives for the tourism industry, which in the 21st century has gained significant development and has become a massive socio-economic phenomenon of a global scale (Doszhan et al., 2020; Koshkinbaeva et al., 2019; Zhansagimova et al., 2022).

Overcoming the consequences of the military conflict in Ukraine is a priority task of the state policy regarding the revival of the tourism industry, the success of which depends on the ability of the state to mobilize a sufficient amount of tourism potential, to ensure the optimal redistribution and use of natural, economic and socio-cultural resources in a spatial tourist destination. However, due to the unstable military and political situation in Ukraine, the influence of factors related to the rapid expansion of socio-economic, cultural ties and the spread of tourist activity between the countries of the world has been complicated. The tourism industry is a unique indicator of the level and quality of life of the popula-

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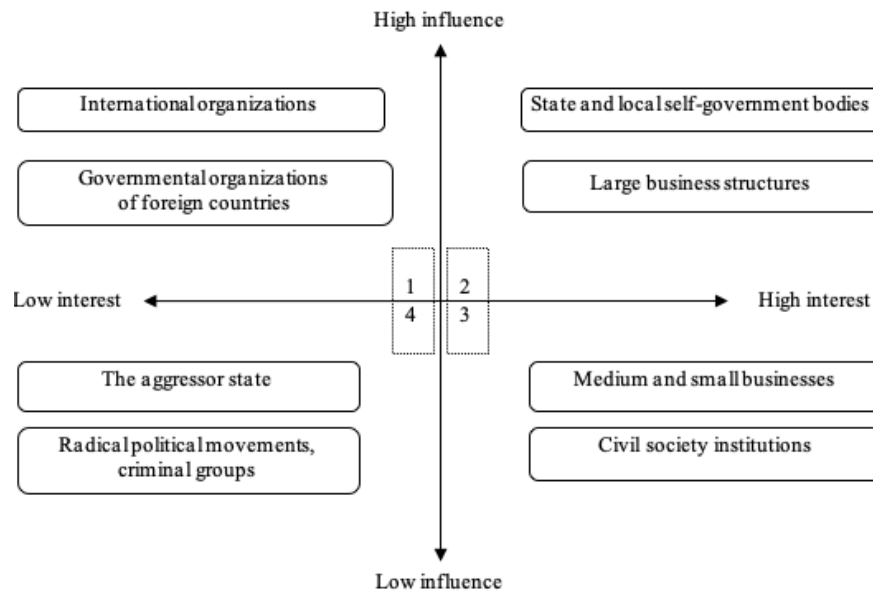


Fig. (1). Matrix of Subjects of the Post-Conflict Restoration of the Tourism Industry of the State.

tion, contributes to the preservation of historical and cultural heritage, the formation of mutual interest of people of different countries and regions, and the stabilization of inter-ethnic, inter-regional and international relations (Ziyadin et al., 2018). The expansion of its scope is due to technological and structural and economic transformation, which activates innovation incentives both in the production sphere, during which added value appears, and in the service sphere, within which it increases at the fastest rates (Babak et al., 2021; Shahini et al., 2022; Baymuratov et al., 2018).

The algorithm of innovative development of the tourism industry is not short-term and concerns both modern types of tourism employment and the regional aspect. The process of development of national economies is complex, as it depends on a set of potentials, such as spatial, production, resource and consumer potentials (Atamanyuk et al., 2016; Parafilov et al., 2020). At the same time, a necessary condition for its implementation is the presence of special regulatory and legal conditions and rational approaches of state policy. Consequently, tourist destinations can develop and effectively influence the provision of a sustainable economy, the elimination of threats and challenges to the modern functioning of the tourism industry in the period of post-conflict reconstruction.

A significant contribution to the study of the impact of military conflicts on the state and its post-conflict recovery was made in the works of C. Adam et al. (2008), T. Addison et al. (2001). The implementation of the state security guarantee in the ontological component of the tourism industry in the period of post-conflict reconstruction is discussed in the works of such scientists as R. Arezki et al. (2009), D. D. Benavides (2001), O. M. Dovbenko (2007). Theoretical, methodological and practical aspects of improving the modernized potential of tourist organizations were considered in the works of such scientists as V. I. Dmytriv (2014), I. Irtyshcheva (2016), G. Trillenber (2014), V. F. Yarovy (2017).

The priority direction of the research is the development of a methodical approach to the assessment of modernized incentives of the tourism sector during the post-conflict reconstruction of the state, which, in the praxeological sense of the development of tourism enterprises, allows modelling the configuration of tourism enterprises. Effectiveness of their activities in the regions according to the coordinate system of the life cycle of innovative potential and forecasting the stages of income growth from the introduction of a tourist brand with innovative variables.

2. MATERIALS AND METHODS

The period of post-conflict recovery of the tourism industry is aimed at rebuilding territories and economic ties destroyed by hostilities. This period activates the beginning of restoration measures, with the transition to the praxeological plane of the development of tourist enterprises. From an economic point of view, the post-conflict restoration of the tourism industry as a complex, holistic and multilateral process of simultaneous improvement of military (restoration of legal rights to natural and cultural resources of tourist destinations), political (territory management), economic (restoration and development of the tourism system) and social conditions (distribution assistance to victims, restoration of destroyed tourist infrastructure, social protection), shapes the configuration of the innovative potential of tourist enterprises and stimulates private tourist business to ensure the macroeconomic stability of the state (Polchanov, 2017; Cherunova et al., 2018; Yaroshenko et al., 2020). The recovery of the tourism industry is determined by the scale of losses, the level of financial and investment potential of the state and its donors, as well as the levers of regulation of innovation potential. A matrix of subjects of the post-conflict recovery of the tourism industry was built (Fig. 1).

They are divided into four groups: the first group includes international and governmental organizations of other countries, which are characterized by a high level of influence

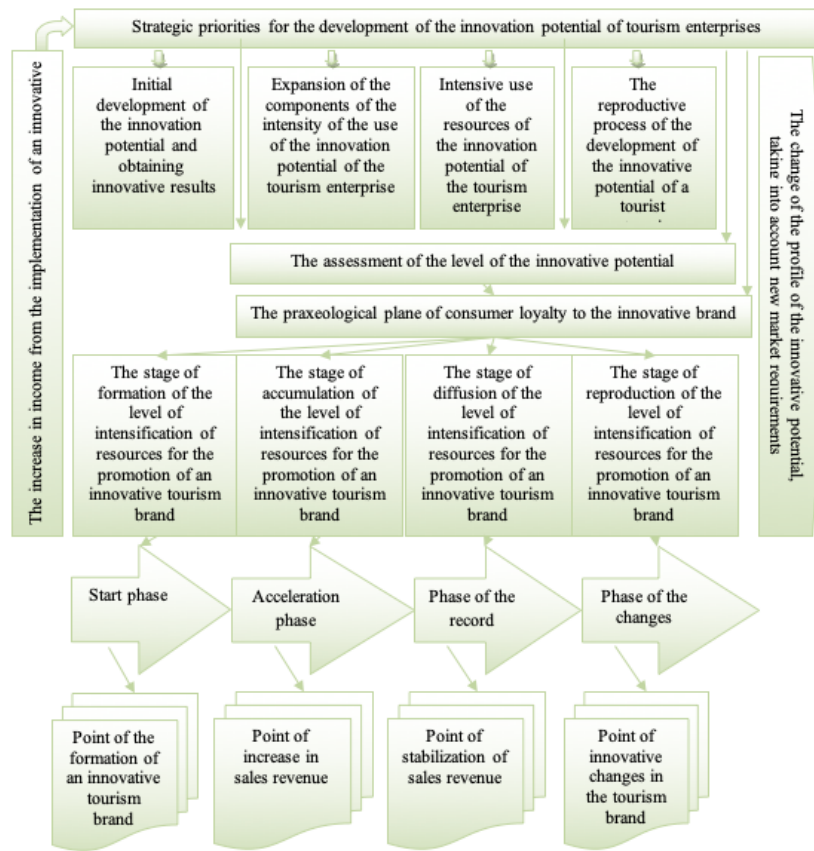


Fig. (2). Model of the Profile of the Life Cycle of the Innovative Potential of a Tourist Enterprise By Phases and Stages of the Level of Resource Intensification Regarding the Promotion of an Innovative Tourist Brand.

and a lower interest in the success of innovative projects than others. It is necessary for this group to reveal the importance of settling the situation in order to increase their interest; the second group (main), includes state administration bodies, municipalities and big business, coordination of actions between themselves and other subjects is necessary for maximum harmonization of the interests of the most interested parties; the third group includes medium and small businesses, as well as civil society institutions for constant information on the state of affairs to maintain interest, and in some cases to provide opportunities for increased influence; the fourth group – opponents of post-conflict reconstruction (the aggressor state, radical political movements, criminal groups that have a significant interest in the conflict) (Yevdokymov and Polchanov, 2017).

According to O. V. Shevchenko (2017), it is possible to distinguish such stages of the recovery of the tourism industry as the post-crisis situation (that is, before the full resolution of the conflict), the situation after the settlement and the stage of long-term recovery, at each of which the priority and scale of measures change. Post-conflict reconstruction is also a catalyst for the growth of innovative incentives in the tourism industry, especially entrepreneurial initiative among ex-servicemen, women in the reconstruction of tourist destinations. The different level of interest and influence of the post-conflict period on the restoration of tourism in Ukraine is due to the need to model the configuration of the movement of tourist flows in the coordinate system of the life cycle of innovative potential, which allows forecasting the

stages of growth of income from the realization of the tourist brand, through the formation, accumulation and diffusion of the level of intensification and reproduction of resources when transitioning to an innovative state of development (Fig. 2).

3. RESULTS

A tourist brand as a set of its consumer characteristics is defined as a multi-attribute product (goods), which describes it in the form of a multi-attribute model (Table 1). From a methodological point of view, the importance of the tourist brand for the consumer based on its specificity and characteristics is positively perceived when evaluating the attractiveness of the product (goods). At the same time, the tourist randomly or purposefully analyses each key characteristic of the tourist brand, the level of efficiency and functionality of the received service from the expected product or phenomenon (Gerasimenko, 2013; Tsybmal, 2012). Assigning a level of utility to each characteristic of a tourist brand, the consumer equates the degree of utility with the number of properties in (the product). Utility is a subjective value, so each consumer evaluates different tourism brands differently (Trusova et al., 2020a).

The priority of the features of the tourist brand is assessed according to the level of relationships, the presence of characteristics – according to the interval scale. The resulting (integral model) consists of elements of efficiency and its aggregate functionality (Beydyk, 2001). By combining the

Table 1. Multi-Attribute Model of Tourism Brand Evaluation Based on the Structure of Lements.

Objective Properties Describe Reality	Attributive Characteristics	Evaluation of Characteristics		Consumer Value	
		Weight (Priority)	Presence (Perception)	Shares of Utility	Cumulative Utility
B1i	X1	P1	H1	U1	U
B2i	X2	P2	H2	U2	
...	
Bn	Xn	Pn	Hn	Un	

elements of the model in various combinations, it is possible to obtain a measure of the consumer attractiveness of a tourist brand, in the context of a specific consumer, that is, to assess the usefulness attributed to a tourism product by a specific consumer. At the same time, the meaning and role of attributive features are revealed on the basis of two conditions, namely the priority of the object and its availability. A personal analysis of the role of various attributive principles of a phenomenon or service is realized by a group of tourists and reveals the general meaning of such an attribute. This process is based on the use of formula (1) (Birkovich, 2014; Chernikova, 2012; Golovchan, 2009).

$$U_{ji} = P_{ji} \times H_{ji}, \tag{1}$$

where, U_{ji} – is the individual utility of the characteristic (i) on the part of j-person; P_{ji} –evaluation of the priority of characteristic (i) for j-person; H_{ji} – analysis of the j-th person's understanding of the characteristics(s) in the travel brand.

The cumulative role of a tourist brand on the part of a specific consumer is estimated as the sum of benefits that they attribute to the characteristics of the product (goods) (formula 2).

$$U_{jy} = P_{j1} \times H_{j1} + P_{j2} \times H_{j2} + \dots + P_{ji} \times H_{ji} = \sum_{i=1}^y P_{ji} \times H_{ji}, \tag{2}$$

where, U_{jy} – the cumulative role of the tourist service on the part of the j-individual; P_{ji} – analysis of the priority of features (i) for the j-person; H_{ji} – the level of presence of characteristic (i) in the tourist product, points, assessed by j-person; y – the volume of attributive signs in the tourist object.

Based on the hypothesis that the attributive characteristics of a tourist brand are independent and strictly unrelated, it is possible to form an integrative model of its usefulness (formula 3).

$$SF_{jy} = \frac{U_{ji}}{SO_{ji}}, \tag{3}$$

where, S_{jy} – is an integral indicator of the utility or degree of satisfaction of the j-consumer with the y-number of features of the tourist object; SO_{ji} – the total number of indicators of the priority of the features of the tourist object for person j is established by the formula (4).

$$SO_{ji} = P_{j1} + P_{j2} + \dots + P_{jy} = \sum_{i=1}^y P_{ji} \tag{4}$$

Therefore, the sum of utilities, i.e., the products of importance on the evaluation level of the presence of the characteristic, of the y-th number of attributive characteristics of the tourist brand should be attributed to the sum of the importance levels of the y-th number of characteristics of the tourist brand. With the help of such a methodological tool, it is possible to describe the average data of the aggregate value of all features of the tourist object (SF_{aver}). This indicator makes it possible to assess the attractiveness of a tourist brand in the state and tourist destinations of a separate region from the consumer's point of view, based on its components: the general state of the services provided; infrastructure quality; state of food; the quality of excursion possession and approaches to the organization of events or provision of other services. The evaluation of the components of the tourist brand allows to make decisions regarding the improvement of certain characteristics of the regional tourist brand (formula 5):

$$SF_{aver} = \sum_{i=1}^y SF_{aver i} \tag{5}$$

In contrast to outdated personal assessments by specific tourists, the current assessment is objective, as it refers to average indicators, which allows bringing subjective assessments of consumers to an objective form acceptable to them. analysis. The above indicators of the degree of satisfaction with the tourist brand in the tourist destinations of a particular region indicate that it is a priority for the client and increase the tourist flow in the region. The distribution of innovative incentives of a tourist enterprise regarding the introduction of a tourist brand at a certain stage of the life cycle of innovative potential cannot be arbitrary, because one of its stages has qualitative differences from another due to different regulatory mechanisms of the development of the tourism industry (Chernoivanova, 2011; Cherneha and Lokhman, 2019; Trusova et al., 2020c). This means that when identifying the stage of the life cycle of the innovative potential of tourism enterprises, one should abandon the commonly used coordinates “time – income” and proceed to the determination of the stage of the life cycle based on the indicators of the realization of the tourist brand, subject to changes in the innovative transformations that characterize the accumulated resource portfolio of the potential for reproduction of the tourist industry in the country and regions (Chernobai and Kyshevia, 2012; Petrunia and Razzhyvin, 2019).

According to the proposed multi-attribute model of the tourist brand, the profile of the life cycle of innovative potential should be formed in the horizontal coordinate system - development phases (start, acceleration, record, change); verti-

Table 2. Initial Data for Forecasting the Dependence of Income on the Sale of a Tourist Brand in Ukraine and Factor Indicators (Xi).

Years	Income from the implementation of an innovative tourism brand (without VAT, excise duty and other payments), million EUR (y)	The total amount of expenses for innovative developments of the tourist brand, million EUR (x1)	The number of subjects of tourism activity implementing an innovative tourist brand, unit (x2)	The number of service enterprises of the tourism industry, units (x3)	The number of tourist enterprises that have a website and operate on the Internet, units (x4)
2019	3957.03	1079.9	35841	1551069	14525
2020	4002.31	1196.3	35962	1599821	14566
2021	4162.35	1638.5	36654	1705623	14754
2023	4233.71	1754.6	36841	1786542	14895
2024	4797.73	2039.5	36663	1814827	15296
2025	11522.52	2357.8	37462	2250107	15462
2026	18502.97	2469.8	38825	2403987	15608
The upper limit of the law of normal distribution	22977.6	3163.99	39702.84	2781173.02	16233.56
The lower limit of the law of normal distribution	835.13	360.70	34082.31	965105.84	13796.73

cally – increase in income from the sale of an innovative tourism brand, which can be expressed through various economic indicators: increase in income from sale, increase in profit from sale, increase in market share, etc. (Trusova et al., 2022).

At the stage of formation (start-up phase), the strategic priorities are: initial development of the level of intensification of resources for the promotion of an innovative tourism brand with the aim of obtaining innovative results in the future (Chernoivanova, 2011). At the same time, the increase in income from the implementation of an innovative tourist brand is minimal. At the stage of accumulation (phase of acceleration), the strategic priorities are the expansion of the components and the intensity of the use of resources for the promotion of an innovative tourist brand, which ensures a significant increase in income from sales (Cherneha and Lokhman, 2019). At the diffusion stage of the level of intensification of resources for the promotion of an innovative tourism brand (record phase), maximum indicators of revenue growth from sales are provided, the strategic priority of which is the intensive generation of innovative potential (Chernobai and Kyshenia, 2012; Babak et al., 2016). At the stage of reproducing the level of intensification of resources for the promotion of an innovative tourism brand (phase of innovative changes), the process of changing the profile of the generation of innovative potential takes place taking into account new determinants (combinations of resource and non-resource components according to new market requirements) with the aim of forming a new innovative tourism brand (Petrunia and Razzhyvin, 2019).

The regulation of innovative incentives of the tourism industry is connected with the saturated, highly dynamic nature of the life cycle of the innovative potential of tourism enterprises, which requires determining the parameters of the devel-

opment of this industry as a driver of new opportunities for accelerated tourist flows in the regions and the state as a whole, promoting the improvement of tourist infrastructure and relevant quality and price characteristics of tourist services, quality of life of the population, harmonious consolidation of society, popularization of tourism brands of Ukraine in the world (Liashenko et al., 2013; Piekun, 2012).

The parameters of regulation of modern tourism sector incentives during post-conflict recovery are formed under the influence of a complex of factors, which, based on an econometric model, make it possible to predict the conditions for increasing revenues from the sale of a tourist brand in Ukraine, by identifying a number of quantitative indicators that accelerate the life cycle of the innovative potential of tourism enterprises, generating a set of resources for the intensification of the development of the tourism industry (Omelchak, 2014). Thus, Table 2 provides factor indicators that affect the sales volumes of the tourist brand (y) with the corresponding xi notations, on the basis of which interdependencies are established that meet the conditions of the law of normal distribution. 2022 is excluded from the economic model due to the state of war and Ukraine's conflict with Russia, as a terrorist-minded aggressor country (Sadkov, 2006).

The compliance of the original forecasted data with the normal distribution law was checked using the method of analyzing the value of asymmetry |A| and kurtosis |E|. It is assumed that the data do not contradict the normal distribution if there is an inequality (formula 6) (Chornobai and Duma, 2015; Vasylieva, 2010):

$$|A| \leq G\sigma_A; |E| \leq 5\sigma_E \tag{6}$$

Asymmetry:

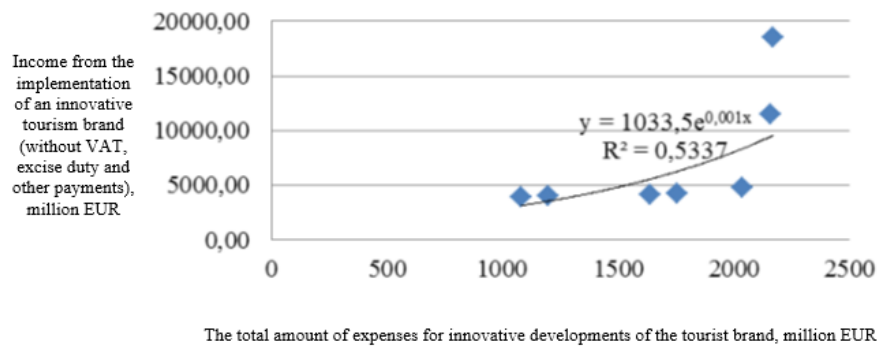


Fig. (3). Econometric Forecasting of the Dependence of Income on the Implementation of the Tourist Brand in Ukraine and the Total Volume of Costs for Innovative Developments.

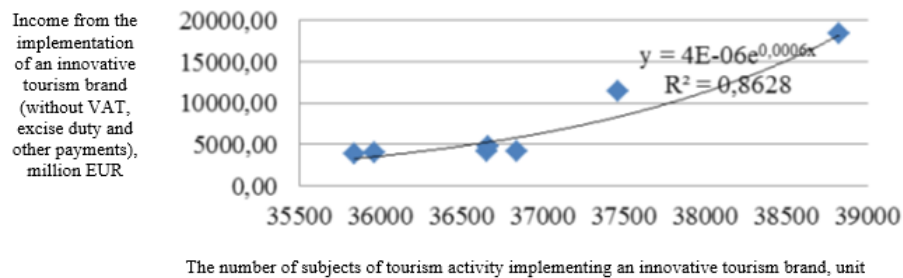


Fig. (4). Econometric Forecasting of the Dependence of Income on the Implementation of an Innovative Tourism Brand in Ukraine and the Number of Tourism Entities Implementing it.

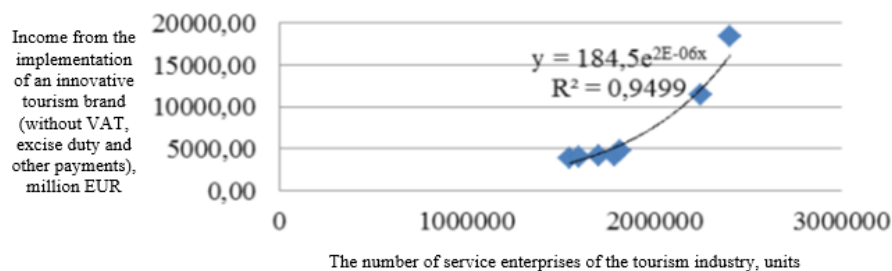


Fig. (5). Econometric Forecasting of the Dependence of Income on the Implementation of an Innovative Tourism Brand and the Number of Service Enterprises of the Tourism Industry in Ukraine.

$$A_y = \left\{ \frac{\sum(y_i - \bar{y})^2}{n}; \sqrt{\left[\frac{\sum(y_i - \bar{y})^2}{n} \right]^3} \right\} \frac{\sqrt{n(n-1)}}{n-2}, \quad (7)$$

$$A_{x_i} = \left\{ \frac{\sum(x_i - \bar{x})^2}{n}; \sqrt{\left[\frac{\sum(x_i - \bar{x})^2}{n} \right]^3} \right\} \frac{\sqrt{n(n-1)}}{n-2} \quad (8)$$

Standard error of asymmetry:

$$\sigma_A = \sqrt{\frac{6n(n-1)}{(n-2)(n+1)(n+3)}} \quad (9)$$

Kurtosis:

$$E_{x_i y} = \frac{n-1}{(n-1)(n-3)} \left[(n+1) \left(\frac{\mu_4}{\mu_2^2} - G \right) + 6 \right] \quad (10)$$

Standard error of kurtosis:

$$\sigma_E = \frac{24n(n-1)^2}{(n-3)(n-2)(n+3)(n+5)} \quad (11)$$

According to the method of correlation-regression analysis, on the basis of the constructed correlation fields (Fig. 3-6), it is possible to conclude that the closeness of the relationship was confirmed between the performance indicator (y) and the total amount of expenses for innovative developments of the tourist brand (x1), the number of tourism entities implementing an innovative tourism brand (x2), the number of serviced enterprises of the tourism industry (x3), the number of tourism enterprises with a website and which operate on the Internet (x4).

This conclusion is confirmed by the corresponding coefficients of determination R^2 , which lead to 1 (for predictors x1, x2, the coefficients of determination are equal to $R^2 = 0.53$ and $R^2 = 0.86$ respectively; for predictors x3, x4, the value $R^2 = 0.95$ and $R^2 = 0.91$, respectively).

Thus, predictive innovative indicators of the intensity improving the capacities of tourist organizations in Ukraine as economic systems, have a direct impact on the reproduction and development of the tourism brand in the country. This indicates a high level of innovation of tourist enterprises and their service areas. Innovation should be considered not as an

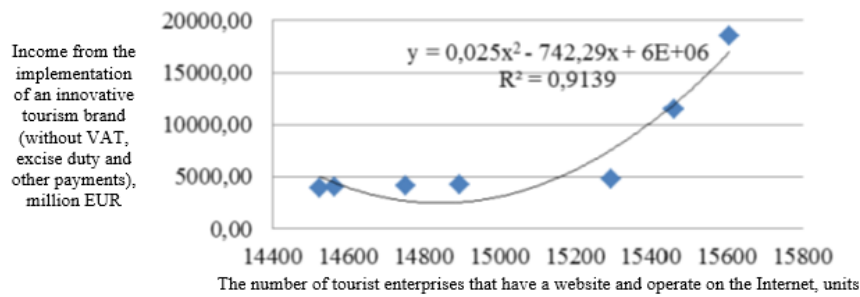


Fig. (6). Econometric Forecasting of the Dependence of Income on the Implementation of an Innovative Tourist Brand in Ukraine and the Number of Tourist Enterprises that Have a Website and Operate on the Internet.



Fig. (7). The Place of Ukraine in the Main World Rankings of Innovation and Tourism in 2021.

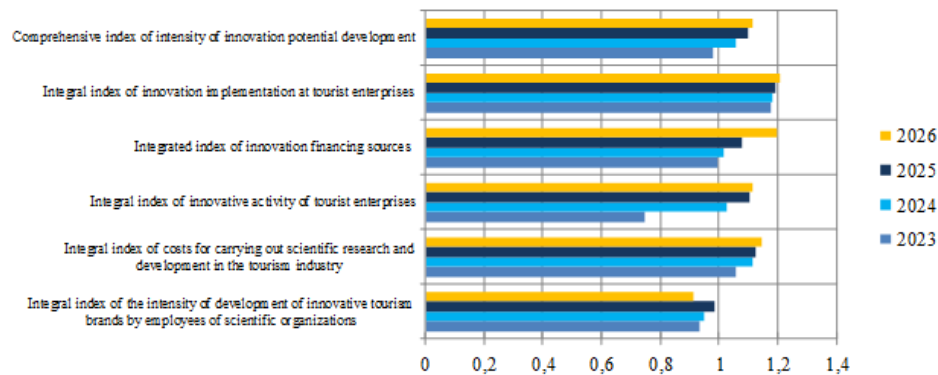


Fig. (8). Prospective Forecast of the Comprehensive Indicator of the Effectiveness of the Development of Capacities and Importance of Tourist Objects of Ukraine According to Integral Indicators for 2023-2026.

end in itself, but as a tool for stimulating income and profit growth, activating innovation potential in order to ensure favorable conditions for increasing competitiveness, which will have a positive effect on socio-economic indicators of the development of the tourism system between the regions of the country. For tourism enterprises, innovations will contribute to obtaining additional competitive advantages, increasing profitability, creating their positive innovative image, which, in turn, will contribute to increasing their market value and attracting additional investments (Trusova et al., 2020b; Trusova et al., 2020c).

It should be noted that in 2021, the main global indices: Global Competitiveness Rating, Index of Development of Information and Communication Technologies in the World Countries, Rating of World Countries According to the Global Innovation Index, and the "Competitiveness of Tourism and Travel" Index characterized Ukraine's innovative potential in the tourism industry. as one that was in the phase

of acceleration of development activation from 2017-2020 (Fig. 7).

On the basis of integral indices of the implementation of innovative incentives in the tourism industry of Ukraine, which indicate a sufficient level of intensification of resources for the promotion of an innovative tourist brand in the country and outside its borders during 2019-2021, we calculated predictive indices of the intensity of the development of the innovative potential of tourist enterprises that reproduce and develop the industry for 2023-2026 (Fig. 8).

Thus, the comprehensive efficiency index of the capacity development of tourism organizations of Ukraine for 2023-2026 is characterized by the phases of acceleration, recording and changing the stages of rapid reproduction of resources, which are aimed at promoting tourism brands not only in the country, but also abroad with the aim of stabilizing the economy and regional clustering of the tourism system, taking into account the wave-like and dynamic trends of

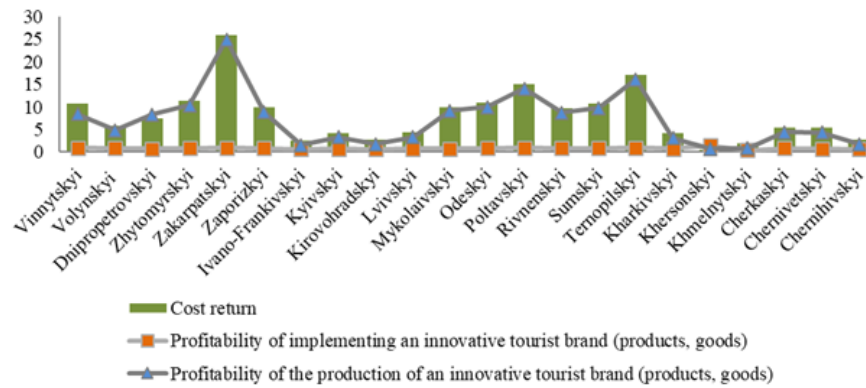


Fig. (9). Forecast Indicators of Innovative Efficiency of Tourist Enterprises in the Regions of Ukraine, on Average for 2023-2026.

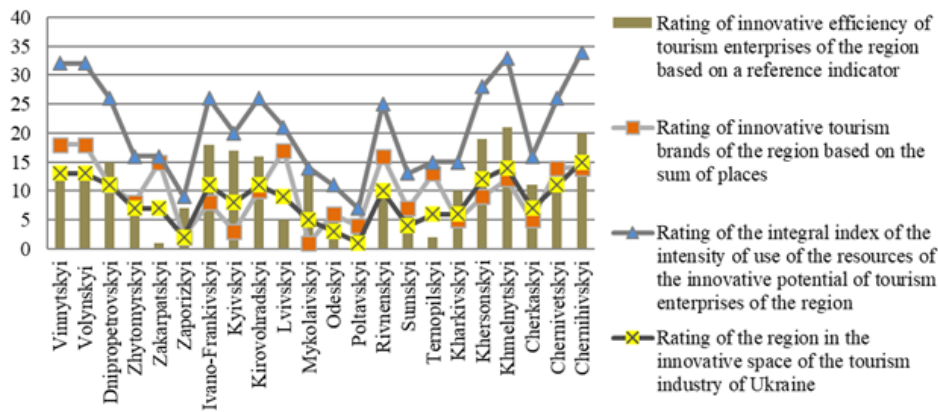


Fig. (10). Forecast Rating of the Innovative Space of the Tourism Industry Between the Regions of Ukraine, on Average for 2023-2026.

integral indicators of innovation financing and innovativeness of tourism industry entities. In the conditions of constant variability of the post-conflict restoration of the innovation environment, the assessment of the intensity of use of the resources of the innovation potential of tourism enterprises in the regions of Ukraine is a complex multifaceted process. A proprietary algorithm and results of determining the innovation rating of the tourism industry by region of Ukraine are proposed on the basis of predictive indicators of the innovation efficiency of tourism enterprises, namely: the cost-effectiveness of the innovation activity of tourism enterprises, the profitability of the implementation of an innovative tourism brand (products, goods), the profitability of the production of an innovative tourism brand (products, goods) (Fig. 9).

Standardization of forecast indicators in the regions of Ukraine relative to the standard is carried out according to formula (12):

$$x_{jY} = \frac{Cf_{ji}}{Cmax_{ji}}, \quad (12)$$

where, x_{jY} – standardized forecast indicators of the j-th region; Cf_{ji} – forecast indicator of the j-th region; $Cmax_{ji}$ – the maximum indicator value of the j-th region (reference value).

For each region, its rating number is calculated according to formula (13):

$$R_j = \sqrt{(1 - x_{1j})^2 + (1 - x_{2j})^2 + \dots + (1 - x_{nj})^2}, \quad (13)$$

where, R_j – the rating of the j-th region; x_1, x_2, \dots, x_{nj} – standardized forecast indicators of the j-th region.

The results of the forecast calculations regarding the rating place of the regions in the innovative space of the tourism industry of Ukraine demonstrate the following: the first place is the Poltavskiy region (integral innovation rating of the region – 7); second place – Zaporizkiy region (integral innovation rating of the region – 9); third place – Odesskiy region (integral innovation rating of the region – 11). The worst indicators are in Chernihivskiy region (integral innovation rating of the region – 34) and Khmelnytskiy region (integral innovation rating of the region – 33) (Fig. 10).

The forecast growth rate of the share of costs for the implementation of scientific and innovative developments in the tourism industry by organizations of the business and public sectors, as well as the higher education sector in the total amount of investments in the countries of Europe and Ukraine, in particular, is presented in Figs. (11-13). Thus, in 2023-2026, the largest share of growth rates of investment costs for the implementation of innovative research and development in the tourism industry among organizations of the entrepreneurial sectors will be observed in Bulgaria (within 130.6-133.2%), Poland – within 175.2-178.5%; the low rate of spending resources on research will be directed to such countries as Estonia (within 86.7-93.7%), Latvia (within 95.9-98.7%), Slovakia (within 87.4-90.8%). In Ukraine, the rate of growth of the expenditure-resource share from the total volume of investments for innovative development of tourist brands will increase every year (from 99.8% in 2023

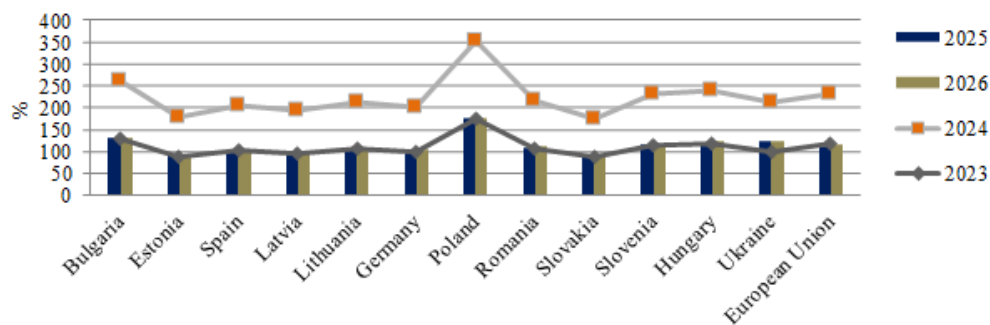


Fig. (11). The Forecast Rate of Growth of the Amount of Investment Losses for the Research of Scientific Developments in the Tourism Industry by Organizations of the Business Sector in the Total Volume for 2023-2026, %.

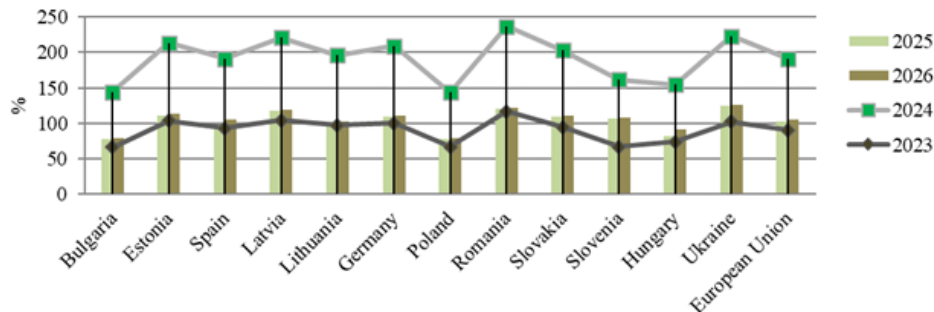


Fig. (12). The Forecast Growth Rate of the Amount of Investment Losses for the Analysis of Scientific Developments in the Tourism Industry by Public Sector Organizations in the Total Volume for 2023-2026, %.

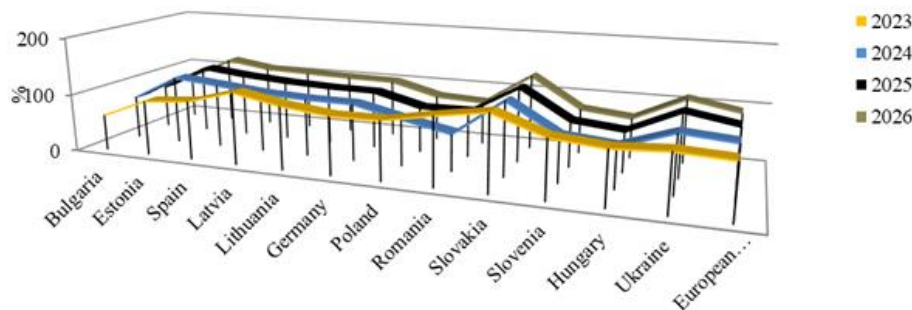


Fig. (13). The Forecast Growth Rate of the Share of Investment Costs for the Implementation of Scientific and Innovative Developments in the Tourism Industry by Organizations of the Higher Education Sector in the Total Amount for 2023-2026, %.

to 125.8% in 2026), taking into account investment flows for the reproduction of regional tourist systems and service sphere of the tourism industry (Fig. 11).

The smallest fluctuations in the growth rates of investment in scientific and innovative developments will be observed in the public sector of Bulgaria (within 66.3-79.4%), Poland (within 66.9-78.5%). In Ukraine, the share of budget investment will grow rapidly from 2024 and will be equal to 120.2%. At the same time, annual investment costs will increase by 5-6% (Fig. 12).

The forecast growth rates of investment costs for scientific and innovative developments in the tourism industry at the expense of the higher education sector in 2023-2026 will have a dynamic tendency to decrease in such countries as: Romania – from 114.5% to 74.5%, Latvia – from 122.5% to 103.1%, Lithuania – from 107.3% to 100.7%, Slovenia – from 97.1% to 77.1%, Hungary – from 89.6% to 68.7%. Growth trends in the share of expenses will be observed in Slovakia – from 127.3% to 128.9%, in Estonia – from 93.5%

to 117.2%, in Spain – from 100% to 105.4%, in Ukraine – from 94.7% to 109.4% (Fig. 13).

It should be noted that the forecast dynamics of the cost-resource component of the total volume of investments will lead to the transformation of the innovative potential of tourism enterprises in the regions of Ukraine, which, in turn, will ensure the accelerated recovery of the tourism sector in it. Even with a small amount of income obtained as a result of providing tourism brands (products, goods) in GDP (in 2023 – 0.24%, in 2024 – 0.48%, in 2025 – 0.59%, in 2026 – 0.62%), the turnover of the tourism industry in 2023-2024 will increase by an average of 2.0 times, in 2025-2026 relative to previous forecast periods – by an average of 2.5 times. The number of enterprises in the field of tourist services will constantly increase: in 2026, this indicator will increase by 2.5 times compared to 2023 and by 55% compared to 2025, which is associated with an increase in demand for tourist services. The provision of innovative incentives for the development of the tourism industry is directly

related to the positive shifts in the innovation potential both in time and in the geographical retrospect of the country tourism system.

4. DISCUSSION

The issue of post-conflict reconstruction of Ukraine has become especially relevant in scientific doctrine. This is due to a number of social challenges caused by the war, as well as the changing role of Ukraine in the international community. In particular, T. Wołowiec et al. (2022) studied this issue in the context of tourism. Ways of recovery and development of the tourism industry after the end of hostilities were studied. According to the researchers, this vector is one of the most promising for the reconstruction of the state's economy, since the taxes and fees that come to the state budget from the provision of tourist services are significant in volume. In his opinion, it is important to develop and modernize the tourist infrastructure. This is due to the fact that most recreation centres or hotels are outdated. For this purpose, it is advisable to attract foreign investors who would finance such projects (Omarkhanova et al., 2022). The authors believe that the tourist infrastructure has really suffered significant destruction, especially in the southern and southwestern territories of the state. Therefore, the improvement and development of such infrastructure is a priority direction for the restoration of the tourism sector.

Ł. Quirini-Popławski et al. (2022) approach is based on historical background. They believe that at the moment, the issue of restoration of the monuments of Ukrainian statehood and identity is a priority. In addition, it is necessary to preserve those elements that demonstrate the consequences of war. In this way, he proposes to combine the ancient and modern history of Ukraine. It is due to the fact that a significant part of the international community before the start of the war in Ukraine did not know anything about this state and its peculiarities. Based on this, it is important to reveal the deep historical experience of Ukrainian lands in order to restore and popularize Ukrainian culture abroad (Petrov and Serdyuk, 2008). The obtained results resonate with the ideas of the author, as they logically combine the present with the past. Moreover, this approach to the development of tourism industries in Ukraine will increase the dynamism of both domestic and foreign tourism, which will increase its effectiveness (Zaporozhets et al., 2020).

The position of F. Higgins-Desbiolles (2022) is based on the fact that the association of Ukraine exclusively with war is inappropriate. Therefore, in her opinion, in the period of post-conflict reconstruction, it is necessary to develop other spheres of culture, art, and sports. The researcher substantiates such ideas with the fact that they will positively affect the image of Ukraine in the international arena. In this case, we are talking about revealing the potential of the Ukrainian population. Therefore, in her opinion, after the victory, it is expedient to organize a number of mass events, contests, concerts, which would attract foreign tourists. She believes that Ukraine should not be associated with war and destruction. In this case, it is advisable to rationally use the attention of the international community and demonstrate the high professionalism and talent of the Ukrainian people. The author partially agrees with the stated position. Undoubtedly,

the image of the Ukrainian territory should be based on the power of its nature, deep history, development of science and other spheres (Kalinichenko et al., 2018). At the same time, it is important to continue to demonstrate to the civilized world the terrible, destructive consequences of Russia's invasion of the territory of Ukraine. Therefore, it is advisable to rationally combine these two approaches into a single whole.

In turn, D. Hryhorchuk (2022) is a supporter of such an innovative approach to the development of the tourism industry in Ukraine after the end of the war, as digitalization of this industry. Thus, at the moment, the level of modernization of the Ukrainian environment is high, compared to the European one. Digitization of the state has a number of advantages for all its subjects. That is why it is possible to present tours for legal entities, entrepreneurs, as well as officials of foreign countries, in order to conduct trainings on digitalization of various spheres of public life (Madiyarova et al., 2018; Niyazbekova et al., 2021). This approach will allow demonstrating the development of Ukraine, as well as the presence of highly qualified specialists among Ukrainians. The author is a supporter of this approach, as it will be able to positively influence the state's investment climate. In addition, Ukraine can become a model for the world community regarding the provision of public services to citizens.

The work of H. M. Zavarika (2022) deserves special attention, in which she noted promising ideas regarding the organization of tourist routes, both for the Ukrainian population and for foreigners. She considers it expedient to develop tours of cities that have been particularly negatively affected by Russia's armed aggression. In her opinion, this will help demonstrate to everyone the tragic and pathetic nature of the Russian army. As a result, it will be possible to attract a larger number of both Ukrainian and foreign investors to the reconstruction of such territories. According to the author, this position is somewhat contradictory and needs to be refined. This is explained by the fact that, in addition to advantages, in particular economic ones, such tours will also have risks, since such areas can be mined.

According to P. Ljubotina and A. Raspor (2022), the tourism sector of Ukraine needs renewal. In this case, we are talking about the opening of completely new tourist spots and objects that were not known about before. This approach is promising, as it is aimed at both the indigenous population of Ukraine and the international community. Undoubtedly, the historical identity and authenticity of Ukraine is an important component of its development. But at the same time, it is necessary to continue to reveal Ukrainian assets from different sides. The position of the researchers is to preserve the historical and demonstrate the modern to foreigners and Ukrainians. In the opinion of the author, this approach, especially in the period of post-war reconstruction, is the most promising among others. It allows logical and rational combination of current assets with future ones. In addition, it will allow getting rid of outdated myths about Ukraine among the international community and reveal the state in a new light (Sannikov, 2017).

The conducted discussion shows various positions that are common in current scientific doctrine. The differences between them testify to the multifaceted nature of the issue related to the innovative development of the tourism industry

in Ukraine in the post-war period. That is why, using the obtained results in the present research and the suggestions of other researchers, it will be possible not only to modernize, but also to rebuild the existing structure of the tourism sector in Ukraine, thus increasing its efficiency.

5. CONCLUSIONS

Thus, transformations in the innovation process in the post-conflict reconstruction of the tourism industry of Ukraine should be the impetus for radical changes in the innovation activity of tourism enterprises, the innovation potential of which is able to ensure the expected potential effect of the implementation of tourism brands in the regions and increase the economic stability of the country.

Considering this fact, we believe that innovative potential is the main condition for the existence of an innovatively oriented tourism system of the country's regions and is a necessary prerequisite for the creation and commercialization of an innovative tourist product (goods), which, against the background of the influence of destabilizing post-conflict factors of the economy, should become a significant impetus for the selection and implementation of innovations in the tourism industry. This is due to a comprehensive, balanced, flexible, operational and systematic assessment of the effect of the intensive use of innovative potential resources (financial, production, research, marketing, etc.), which form different levels of innovative attractiveness of tourism industry subjects and their safety development in the case of diffusion (commercialization) of innovations; has an inclusive nature of the effect of innovative activity.

However, the unpredictable operating conditions for tourism industry entities in the post-conflict recovery period are unfortunately characterized by a high degree of uncertainty and dynamism. This necessitates the search for new methodological and practical approaches corresponding to modern realities to ensure their effective long-term development. One of the most common views on the mentioned direction is the definition of the most influential factors in the formation of innovative competence of tourism enterprises. Innovative competence, in our opinion, should be based on the example of the European innovation space, which in the long cyclical period of post-conflict recovery managed to expand the limits of competitiveness of the subjects of the tourism industry by ensuring innovative orientation.

Accordingly, for Ukraine, the main direction of innovative incentive of the tourism industry in the post-conflict period should be the development of an effective innovation and investment strategy, which should be focused on the regulation and development of the tourism system of the regions, on meeting the needs of tourists in time and space, on the formation of strategic alternatives regarding development of logistics flows and cross-border cooperation between countries.

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