

## Scenario Modeling of Tourism Services Consumption in Russia



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**Abstract.** Given the unstable geopolitical situation associated with the impact of economic sanctions imposed by Western countries, it is extremely important for Russia to ensure its own steady development pace. Saturating the domestic market with Russian-made high-quality goods and services, and promoting consumption that has declined because people significantly reduced spending due to rising prices, are becoming relevant goals. The task of stimulating domestic consumer demand determines the framework of development of the Russian economy in the near future. To address the issue, Russia possesses a great potential for the formation of new growth points. One of them is tourism, whose high multiplicative effect allows us to consider it as an economic driver. The main priorities for the development of the Russian tourism industry by 2030 are reflected in the national project “Tourism and the hospitality industry”. In the context of economic uncertainty, there is an increasing need to improve the quality of management decisions in the tourism sector. In this regard, the purpose of the work is to develop forecasting tools for scenario modeling and assessment of economic effects obtained due to changes in the volume of domestic tourist consumption. Scientific novelty of the research lies in the development of input-

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output modeling methodology to determine the economic effects provided by the growth of demand for domestic tourism services. The results of the study have shown that active development of tourism under the optimistic scenario will provide an almost twofold increase in the volume of gross output annually in comparison with the existing rates of tourist services consumption. We use general scientific methods of analysis, synthesis, comparison, generalization, and tools based on input-output methodology. The information base includes the works of domestic and foreign scientists involved in stimulating domestic tourist consumption, scenario modeling and forecasting of the economy, as well as information from state statistics bodies and World Bank data.

**Key words:** domestic tourist consumption, tourism, domestic tourism, scenario modeling, final consumption, domestic demand.

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### Introduction

The rapid worsening of the geopolitical situation in 2022, which caused increased sanctions pressure from Western countries, has exacerbated a long-standing problem of the Russian economy – insufficient demand for domestic goods and services due to a narrow domestic market. The focus over the past decades on the export of raw materials, dominated by low-added-value goods, has not contributed to its development, which hampered the investment and innovation activity of enterprises. Under current conditions, the question of modernizing the Russian economy in order to complicate its structure and improve the quality of growth has become urgent. The strategy of domestic consumption development, reducing risks and dependence on external demand, dictates the need for high rates of accumulation and consumption in the gross domestic product of the country with low values of imports and exports. This economic model is implemented in the USA, Japan and, recently, in China<sup>1</sup>.

<sup>1</sup> According to the World Bank, in the USA in the third quarter of 2022 the household share of GDP was 68.2%, savings rate – 17.8%, export – 11.9%, import – 15.4%, in Japan in 2021 – 56.1%, 25%, 20%, 19%, in China – 54.3%, 42.6%, 20% and 17% respectively.

In May 2022, it became clear that the Russian economy in its development will be based on the domestic market, as stated in the report of the Bank of Russia on monetary policy<sup>2</sup>. The content of a new model of economic growth based on domestic consumption, supported by industrial and consumer demand, is currently being worked out. Ministry of Economic Development of the RF connects special prospects with the active development of the market of housing construction and the sphere of housing and communal services, agricultural sector, people’s expenditures of the population on cultural services, sports and domestic tourism<sup>3</sup>. These areas are considered to be the main drivers of the domestic market. As noted in the academic environment, current developments provide new opportunities for producers by occupying freed up market niches (Kovalin, 2022). However, the

<sup>2</sup> Report on Monetary Policy. Bank of Russia. May 11, 2022. Available at: [https://www.cbr.ru/Collection/Collection/File/40972/2022\\_02\\_ddcp.pdf](https://www.cbr.ru/Collection/Collection/File/40972/2022_02_ddcp.pdf)

<sup>3</sup> Maxim Reshetnikov presented a medium-term forecast of socio-economic development of the country in the Government of the RF. Available at: [https://www.economy.gov.ru/material/news/maksim\\_reshetnikov\\_o\\_prognose\\_socialno\\_ekonomicheskogo\\_razvitiya\\_strany\\_do\\_2025\\_goda.html](https://www.economy.gov.ru/material/news/maksim_reshetnikov_o_prognose_socialno_ekonomicheskogo_razvitiya_strany_do_2025_goda.html)

structural transformation of the economy in the direction of increasing supply within the country requires not only restructuring production processes and creating conditions for import substitution, but also ensuring the growth of citizens' incomes. Without solving this problem, it will not be possible to effectively use the consumer potential of households, whose contribution to the country's economy was almost 50% in 2021. According to the scientists' calculations, "the level of real incomes at the beginning of 2022 was 9% lower than their maximum level for 30 years of the new Russia, achieved in 2012–2013" (Aganbegyan, 2022).

In recent years, notable steps have been made with regard to the growth of citizens' spending on domestic tourism. Since 2020, as a direction of support for domestic consumer demand during the pandemic coronavirus infection, the Russian government has actively stimulated the consumption of tourist services by the population through the introduction of tourist cashback – a program for subsidizing travel in Russia. Its effect was extended for the years 2021–2022 in the framework of the national project "Tourism and hospitality industry", launched in 2021 and designed until 2030. In total, over the two-year period, 4.5 million people took advantage of the offer, receiving a total of 18 billion rubles<sup>4</sup>. In 2021–2022, thanks to the realization of the children's cashback, 1.2 million children were sent to recreation camps, and 14.2 billion rubles were returned to their parents' bank cards. The implementation of a pilot project since 2022 on the popularization of travel within the region for schoolchildren of 5th–9th grades by issuing free certificates, in which 18 constituent entities of the country took part, was a continuation of the policy related to the support of domestic tourism consumption<sup>5</sup>. According to estimates, about 100,000 children used the certificates.

<sup>4</sup> Data from the web portal "National projects. RF". Available at: <https://xn--80aapampemcchfmo7a3c9ehj.xn--plai/>

<sup>5</sup> Ibidem.

The effect of tourist cashback has been positively evaluated by the authorities, noting its total effect on the economy in more than 100 billion rubles<sup>6</sup>, by representatives of the tourism business, stating that the action has attracted at least 50% of tourists who had decided to travel around the country only through this program<sup>7</sup>, and by the scientific community. Scientists have calculated, that the stimulation of domestic tourism consumption by citizens of the country in 2020 increased the volume of gross output in the economy as a whole, caused an increase in the wage fund and the number of employees (Leonidova, 2021).

At the end of 2022 there were changes in the management structure of Russian tourism: Rostourism was eliminated, and the industry itself was transferred to the direct subordination of the RF Ministry of Economic Development for a more efficient solution of issues, related to the goals of the national project in tourism, primarily the implementation of large infrastructure tourism projects. At the time of writing, the decision to extend the program of subsidizing tourist travel around the country has not been made. Experts associate the uncertainty on this issue with changes in the conditions for tourist cashback, taking into account the introduction of need criteria<sup>8</sup>, and a shift in tourism policy priorities in the direction of increasing not demand, but supply by providing funds for infrastructure development<sup>9</sup>.

<sup>6</sup> Dmitry Chernyshenko: Most indicators of the national project for tourism overfulfilled by the end of the year. Available at: <http://government.ru/news/45422/>

<sup>7</sup> A new promotion with a cashback for tours in Russia will start in January 2022. Available at: <https://www.atorus.ru/news/press-centre/new/58041.html>

<sup>8</sup> The government wants to target tourist cashback to low-income people. Available at: <https://www.vedomosti.ru/economics/articles/2022/10/17/945818-turisticheskii-keshbek-maloobespechennih>

<sup>9</sup> Minister of Economic Development chose the strategy to reduce prices for domestic tourism. Available at: <https://profi.travel/news/56519/details>

Scholars emphasize the importance of drafting socio-economic development scenarios and justifying economic policy measures, aimed at harnessing its domestic potential (Shirov et al., 2022). The results of the scientific publications analysis show, that the consequences forecast for the economy from the management decisions made in the tourism industry, is not given enough attention. In addition, there is no official methodology for calculating the contribution of domestic tourism to the economy in Russia. In this regard, the purpose of our study is to conduct scenario modeling and assess the economic effects of changes in the volume of domestic tourism consumption. To achieve it, it is necessary to generalize theoretical approaches to the study of the features of the tourism impact on the economy, to identify the dynamics of domestic tourism development in Russia, to test a methodological approach for assessing the effects and modeling the changes in economic parameters of government stimulation of domestic tours purchase and to develop proposals on the results of calculations.

Despite the fact that in the Tourism Satellite Account (TSA)<sup>10</sup> the volume of domestic tourism consumption includes not only tourist expenditures of the country's resident, but also expenditures of non-residents, that is inbound tourists, in our study we consider only domestic tourist consumption, because inbound tourism in Russia is poorly developed.

It should be noted that Rosstat does not consider separately the impact of domestic tourism on the country's economy, it makes it difficult to assess the economic effect of its development. Currently

<sup>10</sup> Satellite tourism account is a popular method for measuring the direct contribution of tourism consumption to the national economy, which is connected to the system of national accounts. The basis for TSA data is the survey's results of households, tourism organizations and tourists. At present, TSAs are regularly compiled in Canada, the USA, Spain, the Netherlands and other states. Source: Tourism Satellite Account: Recommended Methodological Framework, 2008. Department of Economic and Social Affairs. Statistical Division. Luxembourg, Madrid, New York, Paris, 2010.

the gross value added (GVA) of the entire tourism industry by country and region, its share in GDP and GRP, approved by Rosstat in 2022, is calculated. This indicator does not take into account the entire output of tourism goods and services, representing the difference between its value and intermediate consumption. It is measured by the set of production units classified as "Tourism" in the OKVED-2 classifier<sup>11</sup>. According to experts<sup>12</sup>, in addition to the types of economic activity directly related to tourism (hotels, travel agencies, museums, etc.), it also includes those types of economic activity, whose goods and services are consumed not only by tourists. This leads to overestimation of indicators, and also affects the quality of industry management. Thus, the actual scientific problem is the lack of methodological tools that allow us to adequately assess the volume of domestic tourism consumption, generated by residents of the country, in the economy and to forecast its dynamics. In the framework of the analysis and generalization of methodological approaches to the above problems, it was revealed that the method of input-output balance will help to give an objective assessment of the change in the volume of domestic tourism consumption; in this regard, we need to develop our methodology to solve this problem in the Russian context.

The information base was the works of Russian and foreign scientists engaged in the study of domestic tourism consumption, scenario modeling and economic forecasting, and information from state statistics, the World Bank data.

The scientific novelty of the study lies in the development of the methodology of input-output model in order to determine the effects on the country's economy as a result of the growth of public demand for domestic tourism services.

<sup>11</sup> Available at: [https://rosstat.gov.ru/storage/mediabank/met%2036\\_25.01.2022.pdf](https://rosstat.gov.ru/storage/mediabank/met%2036_25.01.2022.pdf) (accessed: September 12, 2022).

<sup>12</sup> Point of view: tourism statistics in Russia is still destined to be "exaggerated". Available at: <https://www.tourdom.ru/news/tochka-zreniya-statistike-turizma-v-rossii-po-prezhnemu-suzhdeno-byt-dutoy.html> (accessed: September 12, 2022).

### Theoretical aspects of the study

The relationship between tourism and the economy has been proven in the scientific literature for quite a long time, empirically confirmed by the TLG (Tourism-Led Growth hypothesis), according to which there is a strong correlation between GDP growth and the development of tourism in the country. Tourism is seen as part of exports because it serves as a source of foreign exchange earnings and increases consumption in the country hosting tourists (McKinnon, 1964). Scholars have introduced the economic category of “tourist consumption”, which includes all expenses of the tourist for goods and services consumed during his/her stay, and also for goods and services produced by various sectors which directly contribute to increasing tourism consumption (Baretje, Defert, 1973).

Subsequently, the positive impact of the sector on the emergence of new infrastructure (Balaguer, Cantavella-Jordá, 2002), employment, human capital growth, technology diffusion (Schubert et al., 2011) has been proven. Currently, the research focus has shifted to the study of the relationship between tourism growth and income inequality. Thus, on the example of ten leading tourist destinations of the world, using quantile regression, a negative relationship between tourism growth and income inequality was revealed in China, France, Spain, Italy, Russia and the USA (Raza et al., 2023). This means that industry development minimizes income inequality. On the other hand, there is a strong positive relationship between the two variables in Germany, Turkey, Mexico and the United Kingdom, meaning that tourism growth increases income inequality.

In general, many scholars emphasize that the impact of international tourism on a country's economic growth is the most widely studied, while the number of studies related to domestic tourism is limited (Lee, 2021; Nguyen et al., 2021). A surge of interest in domestic tourism was noted after the COVID-19 pandemic, in which it became not only

a catalyst for the recovery of the tourism sector in many countries (Rogerson, Rogerson, 2021), being more resistant to COVID-19 effects than international tourism (Duro et al., 2022), but also acted as a crucial element of economic recovery in general (Arbulú et al., 2021; Gossling et al., 2021; Kreiner, Ram, 2021; Woyo, 2021). Some papers point out that domestic tourism is characterized by domestic demand and domestic supply, relatively independent of international shocks, which, along with its benefits for the economy (job creation, contribution to investment and production) is a factor in reducing economic vulnerability (Canh, Thanh, 2020).

In Russia, recent interest in the study of domestic tourism and its economic evaluation is also increasing. The authors raise the problem of finding new strategic vectors of its development in the changed geopolitical conditions and the effect of the coronavirus pandemic on it (Simonyan, Saryan, 2022). It is stated that without increasing the incomes of citizens it would not be possible to achieve the goal of the national project “Tourism and hospitality industry” – a 2-fold increase in the number of travels in the country by 2030. Scientists conclude that due to the low level of citizens' income so far there is no reason to increase the demand for tourism, and the fulfillment of the declared indicators is possible only by increasing the frequency of solvent population's trips. The decline in purchasing power remains a constraint for the development of domestic tourism (Donskova et al., 2022). There is also an uneven distribution of tourist demand between territories (Leonidova, 2022), the presence of intraregional disproportions between the size of the tourist flow and the development of tourism infrastructure (Ivanov et al., 2022).

The problems of domestic tourism impact on the economy, including the tools of its quantitative assessment, are most developed in the works of foreign authors. Modeling domestic tourism using correlation and regression analysis is popular in the scientific literature (Zulyaev, 2017; Nikolenko,

Terekhov, 2022), although such forecasts usually characterize the impact of any factors on the industry, without considering industry effects, and “in some cases prove to be inaccurate” (Athanasopoulos et al., 2011).

A summary of the findings (Kronenberg et al., 2018; Tohmo, 2018; Li et al., 2019; Patandianan, Shibusawa, 2020; Liu, 2022) shows that foreign researchers have recently been increasingly interested in input-output analysis as a tool to determine the contribution of domestic tourism to the economy. With the help of this method it is possible to investigate the structural relationships both in the economy as a whole and on the example of individual industries; in addition, to forecast how the total output will change with an increase in final consumption in the sector under consideration (Artal-Tur et al., 2020), to assess its multiplier effect (Loban, Shepelevich, 2015). Noteworthy is the study on measuring the economic impact of domestic tourism in the COVID-19 pandemic, with the example of China’s most populous province of Guangdong<sup>13</sup> (Wu et al., 2022). The authors have attempted to develop a regional tourism satellite account, using a “bottom-up” approach, based on data from sociological surveys on the expenditures of area visitors, input-output tables. The results of the calculations allowed us to estimate the direct contribution of domestic tourism to the economy of Guangdong province in the pre- and post-pandemic period.

It should be noted that the measurement of domestic tourism consumption in Russia is complicated by imperfect statistical information (Krivosheeva, 2020), because the tourism satellite account is not developed, and the data of input-output tables are published with a long delay, significantly limiting research activities. Nevertheless, let us name a number of works (Lukin

et al., 2018; Leonidova; 2021; Leonidova et al., 2022), in which, based on the author’s methods, their suitability for solving this kind of problems is proved. Thus, due to the wide analytical capabilities of the toolkit and the need for its development in the Russian context, it seems appropriate to use it to assess the economic dynamics of the changes in the policy conducted in the field of tourism.

### Research methodology

General scientific methods of analysis, synthesis, comparison and generalization were used to identify trends in domestic tourism consumption in Russia and to develop proposals for its further increase. The development of forecast scenarios for changes in its volume is based on the application of statistical analysis methods, taking into account the trends characterizing the dynamics of domestic tourist trips, determined by the number of Russians staying in collective accommodation facilities.

The following scenarios were used in the implementation of the variable forecasting.

1. The optimistic scenario based on the value of the target indicator of the national project “Tourism and hospitality industry” of 140 million trips by 2030, which is 2.1-fold above the level of 2019. It was determined that the exponential trend function has the highest  $R^2$  for this scenario.

2. The realistic scenario, the implementation of which involves maintaining the average growth rate of 7.3% over the years 2010–2021.

3. The pessimistic scenario based on a growth rate with a decrease of 3.78% each year, demonstrated in 2020, to take into account the effects of the decline from the coronavirus pandemic in the modeling. The study of 2020 crisis parameters makes it possible to model more accurately the worst-case scenario of changes in the volume of domestic tourist consumption. The method of input-output balance was used during the estimation of the effect on the economy, which gives an opportunity to conduct a scenario input-output modeling. As a forecasting tool, we used an input-output model

<sup>13</sup> According to the census, there were 126.012 million people in Guangdong province in 2020.

based on the main equation of the input-output balance, which in matrix form is as follows:

$$x = Ax + y, \quad (1)$$

where  $x$  – vector of total output of production;  $A$  – matrix of direct cost coefficients;  $y$  – final product vector.

As part of the modeling, we used the following equation:

$$(E - A)^{-1} \cdot y = x, \quad (2)$$

where  $E$  – unit matrix;  $(E - A)^{-1}$  – matrix of total cost coefficients.

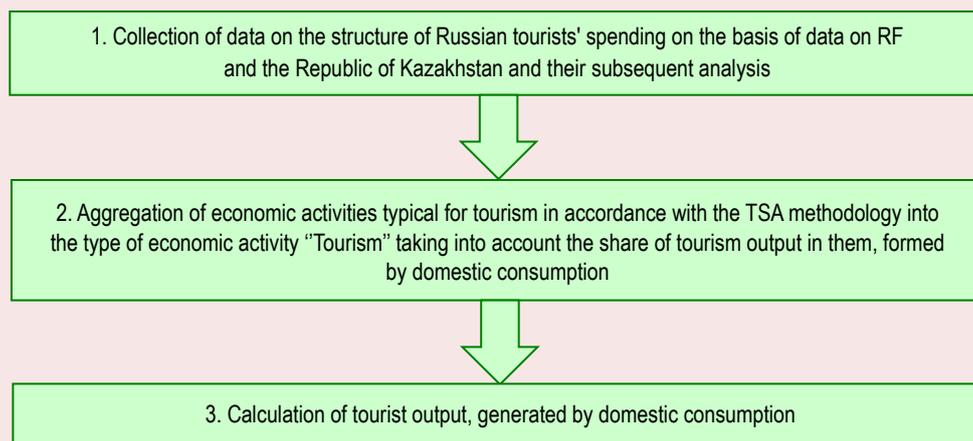
The calculation of the final output volume of tourism generated by domestic consumption is based on the tools proposed in the studies (Leonidova, Sidorov, 2019; Leonidova, 2021; Leonidova et al., 2022, Leonidova, Sidorov, 2023), extended by specifying statistical data. The volume growth forecast is based on the use of an input-output model of the Russian economy. The study assumes that the structure of leisure spending by

domestic tourists of the Republic of Kazakhstan and the RF is similar due to the socio-economic, cultural and mental proximity of these countries. It is based on information from sociological surveys and the Tourism Satellite Account of Kazakhstan, according to which Russian and Kazakh tourists when traveling within the country spend approximately the same amount of money on the main items of recreation spending. The following information was used to estimate the volume of tourist output in the Russian Federation:

- data from a sociological survey<sup>14</sup> of tourists on the amount of spending by Russians on one trip and its distribution;
- data from the Tourism Satellite Account of the Republic of Kazakhstan on the cost structure of domestic tourists traveling for personal and business purposes;
- EMISS data characterizing the production and shipment of goods, works and services.

Determining the volume of tourist output in the Russian Federation is based on an algorithm shown in *Figure 1*.

Figure 1. Scheme of determining the volume of domestic tourism output in the Russian Federation economy



Source: own compilation.

<sup>14</sup> A sociological survey of the travel service Tutu.ru. Available at: <https://travelvesti.ru/news/skolko-rossiyane-tratyat-na-puteshestviya-i-kak-raspredelyayut-byudzhet-poezdki.html> (accessed: September 12, 2022).

Thus, in accordance with the algorithm, the volume of domestic tourism output in the RF is calculated by isolating from the types of economic activities, presented in the Russian qualifiers, the share that is caused by the consumption of domestic tourists, and their subsequent aggregation in the type of economic activity “Tourism”. The volume of domestic tourism output is determined in constant prices.

### Main results of the research

#### *Trends in the consumption of tourism services by the population in the Russian Federation*

According to the World Tourism Organization, in the pre-pandemic period in the world there were about 9 billion domestic tourist trips, which was 6-fold higher than the number of international trips<sup>15</sup>. According to researchers’ estimates, about 85% of tourist trips in the world came from the domestic market (Hall, 2015). Residents’ expenditures on domestic vacations are much higher than those of international tourists, which allows us to say that the contribution of tourism to the economy is ensured by the domestic tourism development (*Fig. 2*).

It is worth noting that, globally, total travel spending in 2021 increased by 26% after a sharp

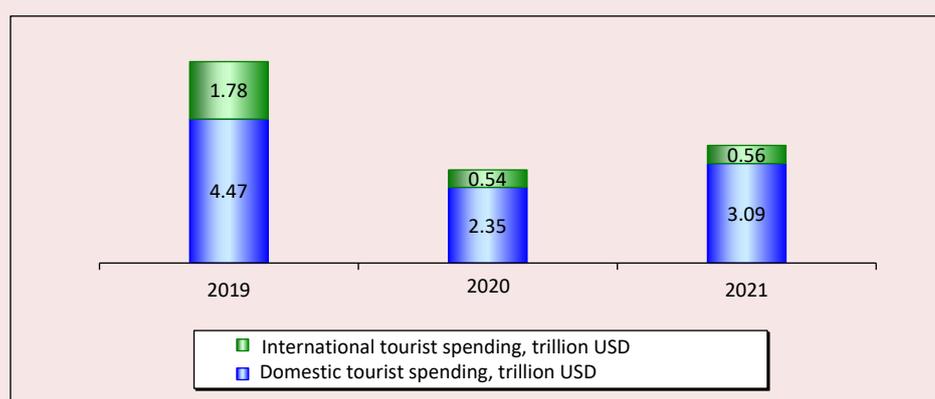
decline in 2020 due to the coronavirus pandemic, amounting to \$3.65 trillion. However, the indicator value remained below the pre-pandemic level.

Among the world’s largest domestic tourism markets in terms of the number of tourist trips are China, the USA and India, mainly because of their large population and area. The USA, China and Germany are the world leaders in terms of domestic tourist spending (*Table*).

It is worth noting that in Russia, the assessment of domestic tourism flow, determined by the number of trips, is carried out by Rosstat only since 2022, which makes international comparisons for an earlier period difficult.

The volume of domestic tourist spending in Russia is much lower than the global average, which reduces the contribution of the tourism industry to its economy. At the same time, the country has a high potential for increasing domestic tourism consumption, the realization of which is constrained by a lack of both demand and supply. This explains the fact that for a long time there has been a steady tendency for Russians to spend their holidays not on trips, but at home or at their dacha (in 2015 – 63%, in 2022 – 61%; *Fig. 3*).

Figure 2. Total global travel and tourism expenditures from 2019 to 2021 by type of tourism (in 2021 prices)



Source: WTTC, Oxford Economics, Statista. Available at: <https://www.statista.com/statistics/1337656/travel-and-tourism-spending-worldwide-by-tourist-type/> (accessed: February 10, 2023).

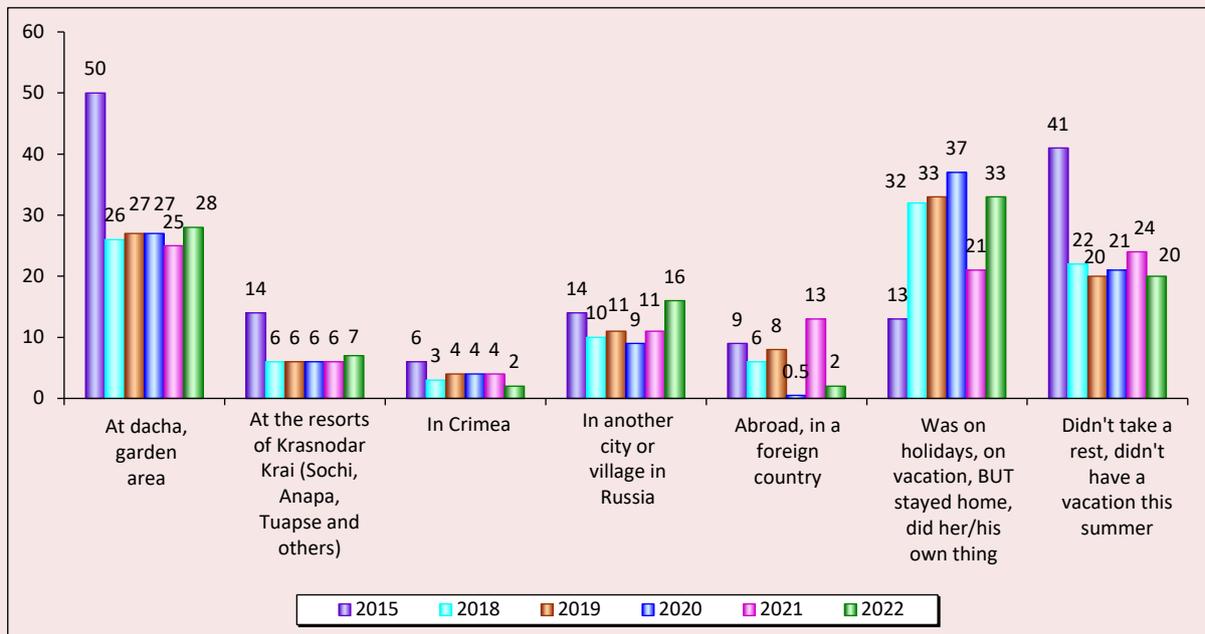
<sup>15</sup> UNWTO Briefing Note – Tourism and COVID-19, Issue 3. Understanding Domestic Tourism and Seizing its Opportunities. Available at: <https://doi.org/10.18111/9789284422111>

Indicators of tourism development in the countries of the world (in prices of 2021)

No.	Country	Expenditures of domestic tourists, billion USD			Expenditures of inbound tourists, billion USD			Number of domestic tourist trips, million units		
		2019	2020	2021	2019	2020	2021	2019	2020	2021
1.	USA	1085.5	571.7	731.5	190.9	39.8	40.3	2318.0	1580.0	2040.0
2.	China	931.8	365.6	458.7	147.4	19.4	14.1	6005.0	2879.0	3246.0
3.	Germany	321.3	200.4	212.2	52.6	22.0	24.6	1609	85.6	85.1
4.	India	155.8	97.0	151.1	34.3	14.5	8.8	2321.9	610.0	677.6
5.	Japan	214.4	95.5	134.0	47.3	10.6	1.0	587.1	293.4	268.2
6.	Mexico	149.6	108.0	130.4	27.1	12.9	20.4	101.7	48.0	no data
7.	United Kingdom	186.5	75.1	118.2	43.6	9.1	4.7	1.775	no data	no data
8.	Italy	116.8	66.8	117.9	50.7	19.1	22.9	132.8	74.6	73.0
9.	France	128.4	67.7	102.6	66.3	32.9	43.9	260.5	212.0	251.6
10.	Brazil	80.9	53.4	69.4	5.1	3.2	2.9	no data	13.3	12.2
For reference: Russia		44.1	26.7	39.6	16.5	5.3	6.0	no data	no data	no data

Sources: OECD (2022), OECD Tourism Trends and Policies 2022, OECD Publishing, Paris. Available at: <https://doi.org/10.1787/a8dd3019-en>, Available at: [https://www.oecd-ilibrary.org/sites/a8dd3019-en/1/1/index.html?itemId=/content/publication/a8dd3019-en&\\_csp\\_=dd10a6327bf40b05da33e7fa1f979e3e&itemILO=oeed&itemContentType=book](https://www.oecd-ilibrary.org/sites/a8dd3019-en/1/1/index.html?itemId=/content/publication/a8dd3019-en&_csp_=dd10a6327bf40b05da33e7fa1f979e3e&itemILO=oeed&itemContentType=book); World Tourism Organization. Available at: <https://www.unwto.org/tourism-statistics/key-tourism-statistics>; World Travel and Tourism Council. Available at: <https://wtcc.org/research/economic-impact>

Figure 3. Distribution of Russians' answers regarding vacations (VCIOM poll, any number of answers), % of respondents



Source: The results of summer vacation – 2022. VCIOM. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/dacha-ili-kurort-gde-otdykhali-rossijane-ehim-letom> (accessed: January 10, 2023).

However, in 2022 there is quite a noticeable increase in travelers in Russia (+6 p.p. compared to 2018 and +5 p.p. compared to 2021). It is noteworthy that among all those who spent a vacation in 2022, the most numerous category is young people from 18–24 years old – their share is almost 30%. This was facilitated by an active policy for the development of domestic tourism in recent years, one of the most notable measures of which was the introduction of the tourist cash-back program. According to opinion polls, the population is well aware of it. Thus, the number of Russians who know about this offer has significantly increased, from 56% in 2020 to 72% in 2022<sup>16</sup>. Also, according to VCIOM surveys, the population is informed about the implementation of the national project “Tourism and the hospitality industry”. At the end of 2022, 64% of respondents were familiar with it, and awareness of it has increased since last year (by 5 p.p. by 2021), which made it one of the five national projects with the highest increase in recognition among the population<sup>17</sup>. According to 63% of respondents, the government’s efforts to develop this sphere are very noticeable. Among the most notable improvements in the implementation of the national project, Russians especially noted an increase in the variety of recreation offerings (77%) and improved awareness of attractive areas to visit (76%).

The growth of domestic tourism in recent years is confirmed by official statistics (*Fig. 4*). For

example, in 2021, the highest number of Russians sent by travel agencies to vacation in Russia in the last decade was recorded – almost 6 million people, which is higher than the pre-pandemic value (2019) by 36%.

The growth in the number of visitors to hotels and other accommodations in 2021 is almost close to the pre-pandemic level of 2019 (*Fig. 5*).

Increased interest in domestic vacations is also registered in the segment of river cruises. Thus, according to estimates of the Ministry of Transport of Russia, the volume of river transportation in 2022 increased by 35% to the level of 2019 and 2021<sup>18</sup>. According to the forecasts of Rostourism, the flow of cruise tourists, represented mainly by Russian travelers, by the end of 2022 should be at least 700 thousand people<sup>19</sup>. Among the popularity factors of river cruises among population in 2022 experts named action of tourist cashback program which caused demand for river cruises by 25–30%<sup>20</sup>. On the whole the river cruise market turnover at the end of the year increased by 30% and amounted to 25 billion rubles<sup>21</sup>.

Thus, all of the above allows us to say that the tourist cashback program stimulates domestic consumption in the country. Achieving the indicators of domestic tourism development, set in the strategic documents, requires the elaboration of forecast scenarios of changes in the volume of domestic tourist consumption and assessment of the impact of these processes on the country’s economy.

<sup>16</sup> Superjob.ru research center. Sociological survey. Location of the survey: Russia, all districts. Number of settlements: 360. Time of the survey: August 29–31, 2022. Target population: the economically active population of Russia over 18 years old. Sample size: 1,600 respondents. Available at: <https://dzerzhinskiy.superjob.ru/research/articles/113645/osvedomlennost-rossiyan-o-programme-turisticheskogo-keshbeka-vyrosla/>

<sup>17</sup> National projects – 2022: Plans and results. VCIOM. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/nacionalnye-proekty-2022-plany-i-rezultaty>

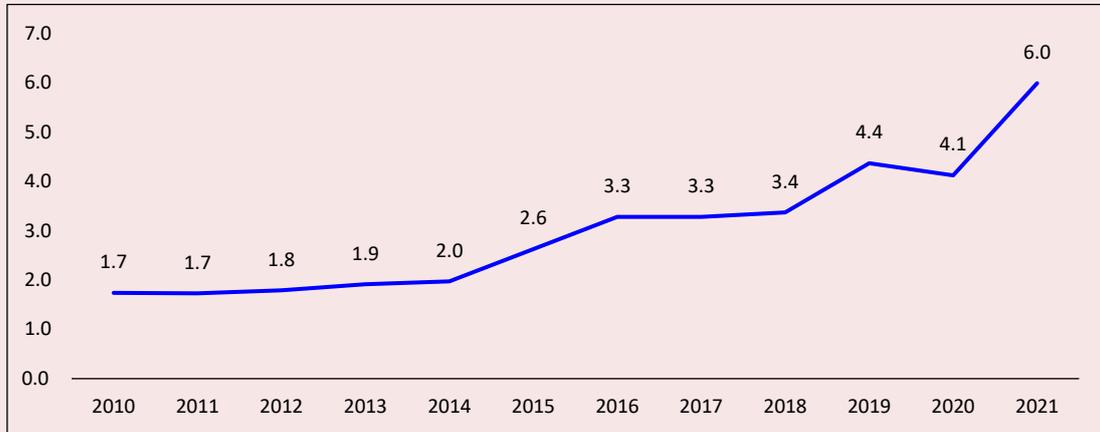
<sup>18</sup> Sidorikhina I. “We don’t need the Turkish coast”. Available at: <https://expert.ru/2023/01/25/ne-nuzhen-nam-bereg-turetskiy/>

<sup>19</sup> Rostourism: 700 thousand tourists are going to go on river cruises in 2022. Available at: <https://www.atorus.ru/news/press-centre/new/59671.html>

<sup>20</sup> Cashback on river cruises may end early, too. Available at: <https://www.atorus.ru/news/press-centre/new/59350.html>

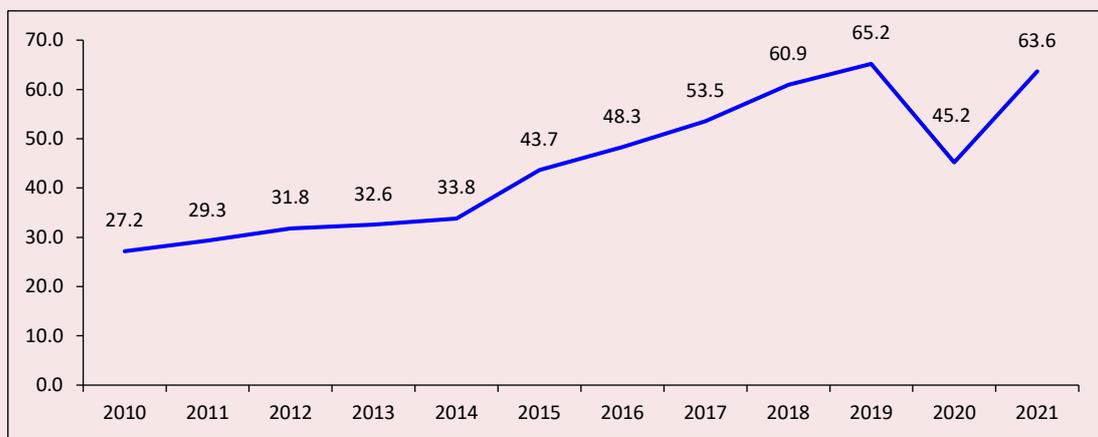
<sup>21</sup> Turnover of Russian river cruise market in 2022 increased by 30% – up to 25 billion rubles. Available at: <https://portnews.ru/news/341680/>

Figure 4. Dynamics of the number of Russians sent on tours in Russia, million people



Source: Rosstat.

Figure 5. Dynamics of the number of Russians placed in collective accommodation facilities, thousand people



Source: EMISS.

**Assessing the effects of stimulating domestic tourism consumption**

Comparative results of forecasting the volume of domestic tourism consumption according to the three proposed scenarios are shown in *Figure 6*.

The optimistic scenario takes into account the guidelines laid down in the national project “Tourism and the hospitality industry” and suggests an increase in the indicator by 2.1-fold from the level of 2019, caused by the growth of demand for travel due to the implementation of infrastructure projects, increasing incomes of citizens, improving the transport accessibility of tourist routes, etc.

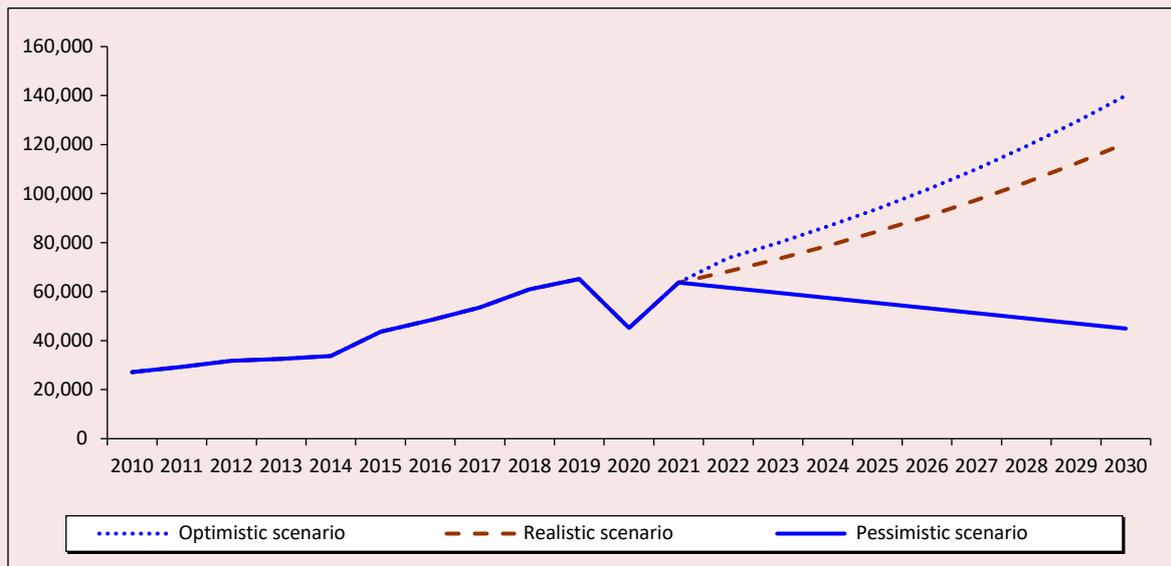
The realistic scenario is based on the fact that the frequency of trips will remain at the level demonstrated in 2010–2021. This option does not involve active stimulation of domestic tourist consumption. It characterizes the slow development of the tourism industry and the lack of additional financial opportunities for the population to increase spending on recreation.

The implementation of the pessimistic scenario provides for a decline in tourist activity, noted in 2020. It illustrates the “survival” of the industry, stagnation or further decrease in incomes of Russians, reduction of tourism financing due to reorientation of the state to other, more significant projects.

The use of input-output modeling made it possible to calculate the effect on the economy of the country under three different scenarios of change in the volume of domestic tourism consumption (*Fig. 7*).

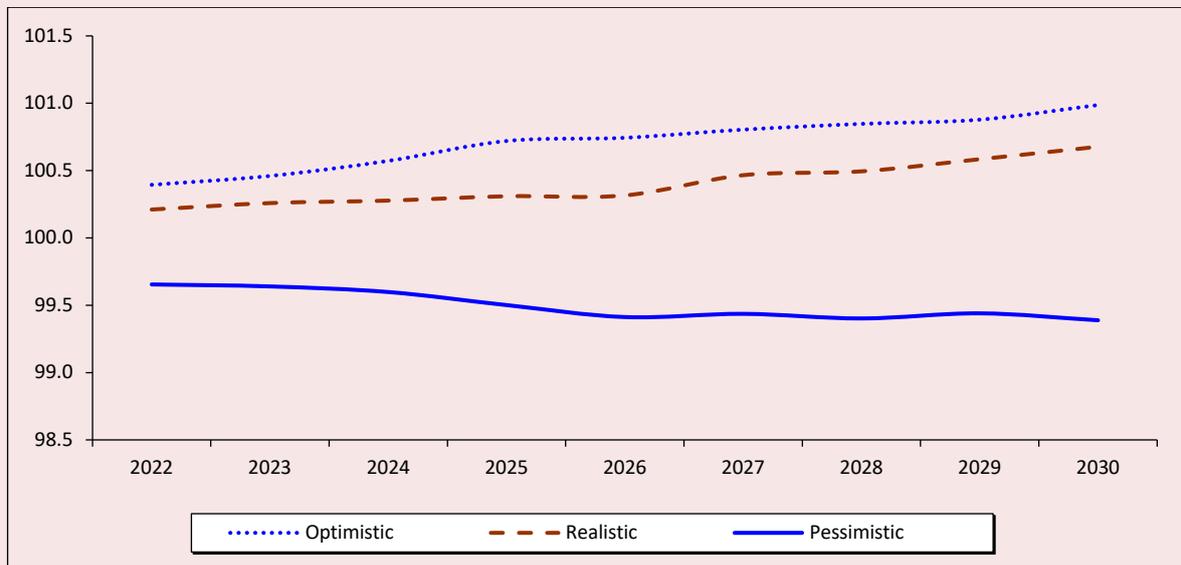
Calculations based on the formed input-output model of the Russian economy, taking into account the multiplier effects generated by the tourism industry, allowed us to determine the importance of stimulating travels of citizens around the country. If the conditions for implementation of the pessimistic scenario occur, the gross output will be reduced by an average of 0.5% annually.

Figure 6. Forecast of the number of domestic tourist trips from 2022 to 2030 depending on the development scenario, thousand people



Source: own calculations.

Figure 7. Forecast of the change rate of output volume in the Russian economy depending on the change in the volume of domestic tourism consumption, % to the previous year



Source: own calculations.

At the same time, the active development of tourism within the framework of the optimistic scenario will give the economy an additional increase in gross output by 0.7% per year. This is almost twice as much as if the existing consumption rates are maintained in the framework of the realistic scenario.

Thus, the use of the methodology of input-output balance has helped us to perform scenario modeling of changes in the volume of domestic tourism consumption and assess its impact on the Russian economy. The results of the calculations prove the importance of the policy to increase public spending on recreation, providing positive economic dynamics.

The importance of continuing to stimulate domestic tourism consumption is pointed out by representatives of the tourism business. Thus, according to experts, the cancellation of the stimulating subsidy program for tours around the country will lead to a decrease in the volume of tourist traffic in the off-season by 10–15%,

hitting Krasnodar Krai and the Moscow Oblast the hardest<sup>22</sup>. According to the Association of Tour Operators of Russia, in 2023, the rise in prices for recreation in Russia will be between 5 and 20%, mainly due to an increase in the cost of transport services<sup>23</sup>. According to a sociological study by Ipsos, in 2023, of the total number of respondents who refuse to travel, the share of those who do not plan a trip because of the high cost was 59% (for comparison: in 2022 it was 47%, and in 2020 – 37%)<sup>24</sup>. Thus, the contribution of domestic tourism to the country’s economy may decrease in the near future, which requires the development of additional measures to support the demand for tours in Russia.

<sup>22</sup> Here we go: Tourist and children’s cashbacks will not return in 2023. Available at: <https://iz.ru/1470720/anastasiia-platonova/dokatalis-turisticheskii-i-detskii-keshbeki-ne-vernutsia-v-2023-godu>

<sup>23</sup> ATOR: In 2023 Russians began to spend more on tours. Available at: <https://tourism.interfax.ru/ru/news/articles/96330/>

<sup>24</sup> Research: Beach holidays as a form of tourism in 2023 is most popular among Muscovites. Available at: <https://www.atorus.ru/node/51753>

## Conclusion

Based on the results of the study, we made the following conclusions.

1. The obtained values of the effects on the economy from the growth of domestic consumption of tourist services determine the importance of increasing the tourist flow within the country.

2. Prospective is the continuation of the subsidy policy for tourist travel within the country, ensuring the growth of domestic tourism consumption.

3. To achieve a 2-fold increase in the number of tourist trips across the country by 2030, significant government efforts are required to stimulate domestic tourism. Analysis has shown that more than half of Russians have not traveled in recent years, mostly due to lack of money for this purpose. It seems that currently ongoing efforts to activate domestic tourist travel on the demand side (cashback, subsidizing programs of domestic commercial air passenger charters), although contributing to an increase in sales of tours around the country and the opening of new destinations for tourists, but largely serve to support the industry in times of crisis. They attract the part of the population that has made tourist trips before, including abroad, to travel within the country. In this regard, it is advisable to expand measures to stimulate tourist travel within the country, aimed primarily at increasing the share of those who travel among low-income groups of the population. Thus, “the gap in spending on recreation between the tenth and the first decile groups is 35-fold” (Shirov, Potapenko, 2020), which significantly limits the ability of part of the population to consume tourist services. A significant reduction in the level of income differentiation is required. If favorable conditions for the development of outbound tourism occur, the volume of consumption of tourist services within the country may decrease due to the reorientation of the wealthier part of the population to outbound destinations, previously replaced by recreation in Russia.

It is also necessary to revise the method of calculating the domestic tourist flow volume, which currently characterizes the frequency of hotel services use. The unorganized tourist flow remains unaccounted for.

In this regard, it is possible to adapt the tourism satellite account methodology to Russian conditions or conduct large-scale statistical studies of households’ consumption of tourist services, to clarify the structure of their expenditure on tourism, to account for domestic tourist flows, to determine the output generated by domestic tourism without reference to the place of enterprises’ registration. Alternatively, Big Data can be used to analyze tourist activity within the country, reflecting a “portrait” of a tourist on the basis of bank card transactions or SIM card geodata. Currently, such services are already used in some Russian regions and have proved themselves positively, helping to assess the popularity of areas, the number and spending of their residents and guests.

The implementation of these areas will allow us to clarify the volume of sales of tourist services consumed by residents within the country, which contributes to the growth of profitability of the industry and, given its multiplier effect, the economy as a whole.

The research significance of the study is to develop a methodology for input-output modeling of the effects on the economy of growth in demand for goods and services of domestic tourism, and the justification of its development ways, taking into account the ongoing modern socio-economic processes. The practical significance lies in the possibility of using the results obtained by the authorities for a better understanding of the current situation in the tourism sector and the development of its strategic priorities. The next stage of work will include a study of the impact on domestic tourism consumption of infrastructure tourism projects and the identification of factors contributing to its increase.

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