

Factors affecting International Trade in Tourism Services in Russia

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Abstract

Background/Objectives: The study is aimed at describing the types of tourism service market; identifying major trends in developing the world market of tourism services; analyzing the competitiveness indicators in Russia and foreign countries. **Methods/Statistical Analysis:** This study employed such scientific methods as the analysis of statistical data on the trends in the world market of tourism of the data on the competitiveness of the countries at this market; synthesis of data on the factors affecting the market of tourism in Russia; correlation and regression analysis for identifying the interrelations between world oil prices, ruble exchange rate, export and import of tourism services in Russia. **Findings:** Based on regression analysis, it has been proved that in the sector of outflow tourism the effect of the oil prices is quite considerable; however, in the sector of inflow tourism in the Russian Federation it is not as evident as it is in the former case, but nonetheless it is still present. The authors discovered fundamental and specific factors affecting the role of the Russian Federation in international trade in tourism services; have characterized the effects of this factors, namely, the factor of Olympic Games, the factor of Crimea and the factor of changing world oil prices, affecting, in turn, the dollar-ruble exchange rate and the changes in the amounts of export and import of tourism services in Russia. **Applications/Improvements:** The results obtained in this study can be used by practitioners in the sector of international tourism as well as by governmental authorities regulating operations at the Russian market of tourism services.

Keywords: Export of Tourism Services in Russia, Import of Tourism Services in Russia

1. Introduction

Today, international tourism is one of the most dynamically developing industries of the world economy.

Over recent years in Russia, active scientific studies have been under way focused on rethinking the phenomenon of tourism in modern society, on studying it as the aggregate activity performed across multiple sectors of economy, on justifying systematic approach to its planning. While analyzing different aspects of the market of tourism services, a special respect is paid to the data provided by such Commerce and Industry Associations as World Tourism Organization (UNWTO), Russian Union of Travel Industry (RUTI), Russian Hotel Association (RHA), Federation of Restaurateurs and Hoteliers (FRH),

Russian Union of Industrialists and Entrepreneurs (RUIE), Chamber of Commerce and Industry of the Russian Federation (CCIR), Association of National Tourist Offices and Representatives (ANTOR), etc.

However, drastic development of tourism goes far ahead of developing corresponding scientific tools for its economical analysis and strategic planning. Industry researches in the sphere of tourism services market have been undertaken in the studies of such authors as Ye. E. Osipova, Ye. Yu. Shirikhina, V. Yu. Voskresenskiy, A. Yu. Kulachinskaya, V. V. Kostyukevich, S. V. Zhukov.

This study also made use of such sources as Reports of UNWTO^{1,2}; the works of such foreign researchers³⁻⁹.

Tourism in the world economy is one of the leading employers as it accounts for over 75 million of working

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places all over the world. An important peculiar feature to be taken into account in Russia is that tourism in the world economy holds the leading position in creating first-time jobs to ensure students' employment. There, it is much easier for younger generation to enter the labor market.

In contrast to the raw materials and energy exports, tourism is not associated with the loss of non-renewable resources. Its development produces huge stimulating effect on developing such key industries of the economy as agriculture and civil construction, transport and communications, trade in and production of consumer goods (over thirty industries in total), being a kind of catalyst for social and economic development of the country. That is exactly why this sector is accountable for 11% of the world GDP, though its fixed capital share makes just circa 7%.

At the same time, up to now, almost 80% of Russian exports consist of raw materials and energy commodities. The need to avoid the scenario when the development of the country is fully dependent on raw material exports requires developing alternative directions creating incentives for diversifying the economy of the country regions.

This study is dedicated to analyzing the opportunities for developing international trade in tourism services in the Russian Federation. Tourism is very attractive due to the fact that its development facilitates developing support and progress in such related industries as accommodation sector, food industry, transportation, insurance, trade and other productive and non-productive sectors. Simultaneously, tourism represents a matter of great interest because now the underused resources, including uniquely attractive territories and the objects of cultural and natural heritage, make up to 70%¹⁰.

The Russian Federation possesses great potential for tourism development. Considerable share of solid land with very diverse landscapes is located in this country. There are unique natural objects (the lake Baikal, Valley of Geysers in Kamchatka Peninsula, Siberian boreal forest, etc.) and numerous historical and architectural landmarks in its territory, that includes parts of Europe and Asia. There is a well-developed international transportation network, though hotel sector and internal transport need be reconstructed and upgraded. It should be noted that there are opportunities in Russia for both summer and winter tourism. It should not be forgotten that, in contrast to raw material and energy commodity exports, tourism is not associated with losses of non-renewable

resources. This type of business is characterized by lower financial "barrier" for entering the market, considerably shorter payback period and high profitability. Its development produces huge stimulating effect on developing such important sectors of the economy as agriculture, construction, transport services, communications, consumer goods production and trade (circa thirty industries in all), representing incentives for social and economic development of the country in general. Therefore, this sector is accountable for 11% of the world GDP, though its share in fixed assets makes only circa 7%. Tourism enriches and improves social and economic infrastructure and international cooperation between countries, states and peoples¹¹.

2. Concept Headings

2.1 The Idea and the types of the Market of Tourism Services

The objectives of this study are to identify the factors affecting participation of the Russian Federation in international trade in tourism services and to build a multifactor model illustrating interrelations existing between dollar exchange rate and the amounts of export and import of tourism services.

Market of tourism services is represented by potential supply and demand for tourism services.

Tourism market is a sphere of meeting the needs of population for services related to recreation, engaging leisure activities or rehabilitation.

The market of tourism services has a structure and it is characterized, on the one hand, from the perspective of the elements of tourism industry and, on the other hand, from the perspective of customer demand. Consequently, this market, as any other market, is not homogeneous. Its structure includes smaller scale markets. In this regard, within the tourism services marketing, there are quite a few attributes for classifying the market of tourism by different aspects. The most important types of tourism market are given below.

From the perspective of spatial characteristics, the following markets are identified:

- Domestic tourism.
- Inflow tourism.
- Outflow tourism.
- International tourism¹².

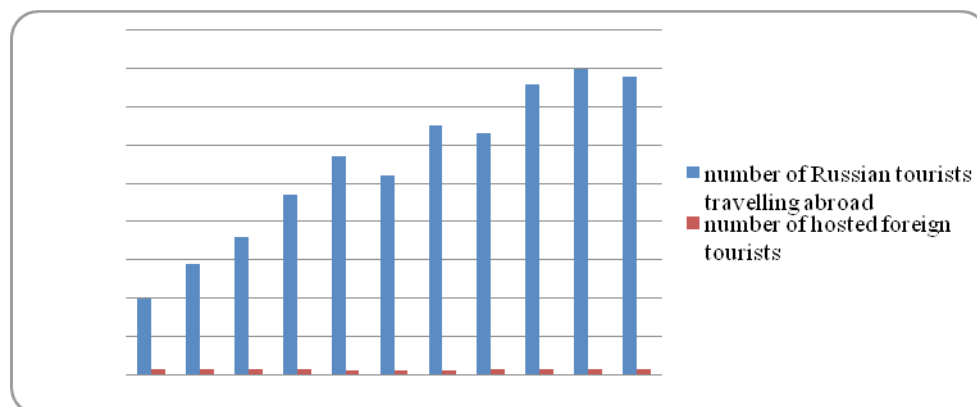
According to **World Tourism Organization (UNWTO)**, the share of tourism in the world GDP, taking into account the multiplicative effect, makes 9.4%. According to the data of the Ministry for Sport, Tourism and Youth Policy of the Russian Federation, the share of revenues from tourism in GDP in different countries amounts to figures as follows: Greece - 15.5%, Spain - 15.3%, Austria - 12.5%, whereas in Russia this figure makes just 6.5%¹³. According to experts, Russia has been making use of its tourism and recreation potential only by 20%, which explains lower contribution of tourism to the economy of the country as compared to other developed countries of the world. In terms of revenues from international tourism, according to **World Tourism Organization (UNWTO)**, Russia occupies 28th position among the countries of the world¹⁴. As regards international tourist arrivals indicator, in 2012 **UNWTO placed this country on position 14** with value of 19.4 million of arrivals (in 2007 it used to be position 10 (20.2 million of arrivals)). Put into this perspective, in 2012 France hosted 76.8 million tourists (1st place in the world), USA hosted 54.9 million (2nd place), China hosted 50.9 million (3rd place). According to forecasts of **UNWTO**, towards 2020 Russia will occupy the ninth position among the countries of the world in terms of the number of tourist visits¹⁵. Among the reasons for this uncertain growth of foreign tourist inflow in Russia, such factors could be noted as constant increase in the costs of tourist packages due to higher prices for plane and railway tickets, growing prices for other services provided for foreign tourists together with poor security services, abuse in relation to foreign tourists by police and customs, complicated visa technicalities, etc.

2.2 Trends of the World Market of Tourism Services

Over 50 years, since 1950 up to 2000, the number of international tourist trips in the world has increased 28 times and the revenues from international tourism have become 238 times higher. Due to fast growth and wide propagation, tourism acquired an epithet “the miracle of the 20th century”. According to the predictions of the experts, the 21st century will be the century of tourism. Year 2012 made a record in international tourist travels all over the world hitting the mark of one billion trips. Different regions of the world made different contributions to achieve this result. Europe and America, North America in the first place, accounted for circa 2/3 of all travels (535 million and 162 million of trips in 2012 accordingly)¹⁶. However, this share has been constantly decreasing giving way to the younger fast growing tourist destinations, especially those in Asian Pacific region. This drastic breakthrough made by this region over last decades at the global market of tourism makes it feasible to anticipate a “Pacific era” and to expect that this region will turn into the hub of the world tourism in the nearest future.

In Figure 1, the authors have represented major trends of the world market of tourism.

With such an intensive growth of the world market of tourism services, the question of estimating the competitiveness of the national markets becomes important. There are several approaches to defining the term “competitiveness”; however, in studying tourism sector, the following definition is most widely applied: “Competitiveness in tourism” is a multifaceted category depending on both



Source: Developed by the authors based on the analysis of statistical data and expert opinions.

Figure 1. Trends of the world market of tourism services.

external and internal factors and determining, in its turn, the attractiveness of tourist destination.

To evaluate the competitiveness of tourism industry in the countries of the world, such large international organizations as World Economic Forum (WEF) and **World Tourism Organization (UNWTO)** have developed a number of tools. Travel and Tourism Competitiveness Index (TTCI) has been adopted as the most universal tool that makes it possible to estimate the competitiveness of the tourism sector in the region in most comprehensive and objective way. This integral index consists of 14 indicators split in three categories as follows: 1) Structure of provisions and rules regulating activities in tourism business (regulatory framework); 2) Infrastructural support of tourism industry (business environment and infrastructure); 3) Resources for tourism development: Availability of natural, cultural and human potential (human, cultural and natural resources). The index is calculated every second year and covers 140 countries.

Among the leaders that reveal the trends of improving their competitiveness, such countries as Great Britain, France and Sweden can be distinguished as demonstrating intensive improvements to the indicators (in Table 1,

Table 1. Dynamics of rating positions of leading countries and Russia according to Travel and Tourism Competitiveness Index (TTCI)

Year Country	2007	2008	2011	2013
Switzerland	1	1	1	1
Germany	3	3	2	2
Island	4	11	11	16
USA	5	7	6	6
Hong-Kong	6	14	12	12
Canada	7	9	8	9
Singapore	8	16	10	10
Luxemburg	9	20	15	23
Great Britain	10	6	5	7
Austria	2	2	3	4
Spain	15	5	4	8
France	12	10	7	3
Sweden	17	8	9	5
Russia	68	64	63	59

Source: Developed by the authors based on the analysis of Travel and Tourism Competitiveness Index (TTCI)

those countries are highlighted in gray). Russia has also improved its indices by several points; however, it remains in the middle of the Index table¹⁷.

2.3 Russian Participation in the International Trade in Tourism Services

In 2015, Russia has occupied the 45th position in the World Economic Forum (WEF) rating of competitiveness in the sphere of tourism, having climbed up by 18 points. By comparison, in 2013, Russia occupied position 63 in this rating, having gone down by four points as compared to 2009.

According to WEF experts, the strongest positions of Russia in the rating are related to the number of natural (position 34) and cultural (position 21) landmarks. The resources of this country in the sphere of medical services and railway infrastructure development have been highly appreciated. Thereat, in terms of the quality of motorways, the country could only manage to occupy the position as low as 124.

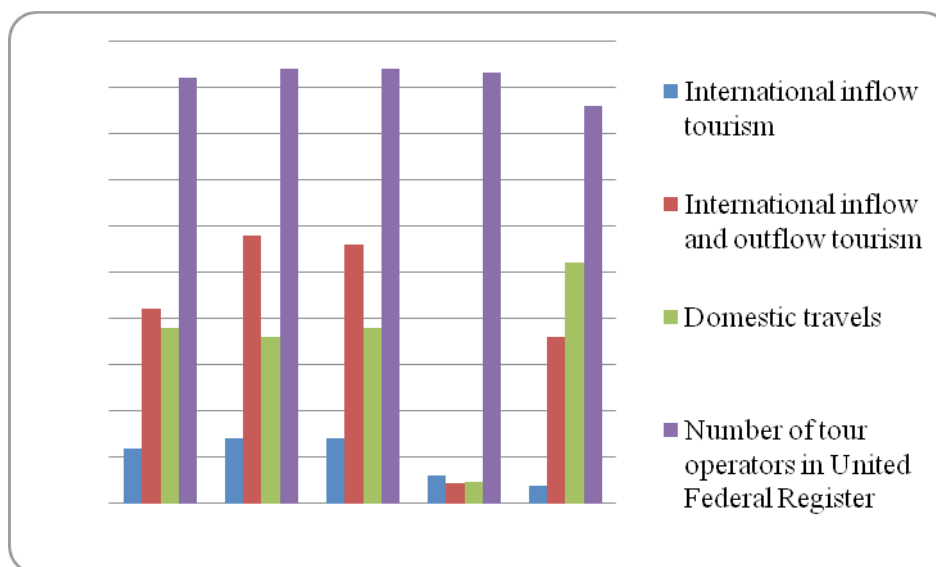
In terms of hotel prices competitiveness, Russia won a sufficiently high position 41, which has been associated, largely, with the weakening ruble exchange rate to other world currencies. Air transportation infrastructure has been estimated as well-developed (position 21).

Low rating positions were awarded to Russia in terms of the factors related to investment climate, property rights protection, Ease of Doing Business (position 106), security level, including murder rate and terrorist threats (position 126) and international transparency (position 99).

Thus, visa requirements set by the Russian Ministry of Foreign Affairs for foreign tourists have been estimated by WEF experts as those among the most demanding in the world (position 120). In terms of priority of tourism for governmental authorities, Russia could only occupy as low a position as 90. In terms of efficiency in conquering foreign markets of tourism, it could occupy no better position than 49¹⁸.

At this stage of development, Russia still is a donor of the world tourist flows, which can be clearly seen in the diagram (see Figure 2). It is evident that the number of hosted tourists cannot be favorably compared with the number of tourists who went abroad, thus, the import of tourism services is considerably higher than the export, which is a sign of poorly developed segment of inflow tourism.

Notwithstanding all mentioned above, many companies have been entering the internal market over last



Source: Developed by the authors based on the data of Single interdepartmental statistics system.

Available from:

<http://www.fedstat.ru/indicators/start.do>

Figure 2. Correlation of tourist inflow and outflow in the Russian Federation.

several years incorporating this line of business in their operations or even adopting it is a core line of their businesses (see Figure 3).

2.4 Factors affecting Participation of the Russian Federation in the International Trade in Tourism Services

In Russian literature, the factors are very often subdivided in external and internal factors, factors of attracting and differentiating demand, objective factors and the factors of governmental policy, static and dynamic factors. External (exogenous) factors affect tourism through demographic and social changes; through economic and financial development; through changes in political and legal regulations; through technological changes and trade development; through transport infrastructure and travel security. External factors can include geographic position of the region, political relations between the countries, international division of labor, level of prices at international market and in different countries, etc. The most important for developing the market of tourism services are the internal factors. These factors include natural and geographical peculiar features and climate conditions of the country, availability and quality of natural resources and the possibility to use them, economical situation in the country, political stability, social order, level of

production development, structure and standards of welfare, opportunities to obtain discounts and rebates for tourism services at the expense of the state and non-governmental organizations, companies and establishments, development of tourism infrastructure, transportation networks, standards of living of local communities, educational and cultural level of population.

The authors of the study have suggested that basic internal factors should be split in two groups (see Figure 4):

- Factors of original tourism attractiveness;
- Factors of state regulations.

The first group covered the factors related to geographical location, natural and climate characteristics, accumulated cultural and historical potential, i.e. the factors that have already been formed independently of the existing political economical and social situation.

The second group should cover the factors which formation and action are in some way directly related to regulations and control over the situation in the country in general and at the market of this sector in particular, that are associated with implementing this or another governmental policy. Here, such factors as social and demographical, political, economical and financial, material and technical will be taken into account.

Applying M. Porter model for evaluating competitiveness and using the results of factor analysis, the authors

Trends in the sphere of forming peculiar features of tourism product	Trends of customer preferences, demand at the world market of tourism services	Trends of tourism industry companies operation	Global (industry) trends
1. Tourism product diversification 2. Concentration on developing tourism product «sustainable development of tourism» 3. Expansion of complement product sales 4. Emergence of new types of tourism	1. Shortening of average tourist trip duration or attempting to visit several countries or several destinations in one trip 2. Growing demand for tourism from elderly people 3. Selecting alternative means of accommodation and transport 4. Growth of mobility of population 5. Faster growth of number of travelers to neighboring or regional countries as compared to number of travelers to remote countries 6. Greater role of technologies 7. More demanding requirements for service 8. Greater popularity of low-costers 9. Growing interest in biking tours 10. Growing popularity of new category of hostels, premium hostels	1. Greater role of transnational corporations 2. Increased competition at tourism market 3. Greater role of technologies	1. Implementing stricter environmental protection measures, «sustainable development of tourism» 2. Greater role of geopolitical factors 3. Recovery of revenue levels in the world tourism industry after the losses incurred during the crisis of 2009

Source: Data of Russian Federal Agency for Tourism.

Figure 3. Correlating the number of tour operators with the types of tourism in Russia.

Factors of initial tourism potential	Factors of governmental regulations
Natural and climatic	Sociodemographic
Cultural and historical	Political
Factor of geographical location	Mass media development
	Material and technical
	Economic and financial

Figure 4. Basic factors affecting development of tourism market in the Russian Federation.

of the study suggested that some specific factors should be added to the existing general factors. Those factors are characteristic for the market of tourism services in the Russian Federation in this particular period of economic sanctions and they reflect institutional changes that occur in the industry at this moment.

Those specific factors include the following:

- Olympic Games factor.
- Crimea factor.
- Factor of the world oil prices.

3. Results

3.1 Olympic Games Factor

In this case, the most important thing for the market of tourism services is represented by considerable effect produced by the development of event-based episodic tourism product on the image of the whole industry and on its further development. Due to the infrastructure built for 2014 Games and due to the interest revealed by Russians to the capital of the Olympic Games, the number of tourists who visited Sochi increased at least by 30% and just within 2014, it amounted to more than five million people. In 2012 and 2013, the flow of tourists coming to Sochi in summer used to make circa 2.5 million people.

In the summer of 2014, according to the information provided by the administration of the city, the number of the visitors to this resort proved to be higher by 22%. In the beginning of the summer, there were concerns that the season would fail to bring about the expected profit; however, by the beginning of August the hotels in Sochi have been booked by 100%. To a large extent, this has been stipulated by the fact that the owners of the hotels busy with attracting the clients have started proposing very advantageous tours that included accommodation at relatively low prices.

That summer, the main attraction point of Sochi was not sea but the Olympic Games objects. As soon as the Olympic Games have finished, the tours to the destinations where 2014 Games took place have been on the program in all sightseeing tour agencies of the city. Free entrance to the Olympic Park, light and music show at the large fountain, cafes and bistros, accessible parking lots – everything served to incite the interest of the visitors. In summer people could hire bicycles, roller-skates, scooters, segways and golf carts. Here, one could have a workout at the area equipped with mini-football pitch, basketball baskets and modern street weight-lifting machines. According to the workers of the park, the number of visitors in summer amounted to 3-4 thousand people on average on workdays and almost twice as many on holidays.

In summer, the tourists also paid great attention to the mountain cluster, though traditionally it has been aimed at the winter season. The hotels of Krasnaya Polyana have been booked by 50% on average in summer. At the destinations where the most important competitions were held during the Olympic Games, one could hike and ride

a horse or a bike. At the resort called “Roza Khutor” a mountainous beach was opened. All shops and souvenir stands opened before the Games continued their business. At the Gorky Gorod resort built specifically for the Olympic Games, the only one in Sochi Water Park with natural sand beach was put in operation. In winter, Sochi expects to host circa one million tourists at average load on hotel room capacity of 80-90%. The ski tracks have been opened on the New Year’s Eve, because the ski season was late due to weather conditions. During the New Year holidays, the hotels of Krasnaya Polyana were completely full; the tourists have booked all rooms.

According to mayor of Sochi Anatoliy Pakhomov, just within the holiday period, about 160 thousand people visited the resort. Such load has been experienced by the city only during summer when the demand was high. Due to the overflow of tourists, the city even had to introduce extreme measures, namely, to limit the amount of the visitors who wanted to go skiing within the period from December 26 until January 10, the price for ski-passes has been increased from 1.8 to 2.5 thousand rubles. The administration asked the inhabitants of Sochi to refrain from visiting the mountain resort because of the lack of parking lots. The Olympic Games made the city famous not only in Russia but also far beyond as well. Moreover, since October 19, 2014 Sochi international airport established a regime of “open sky”, eliminating all limitations on foreign flights to the city that facilitated attracting even more foreign tourists. This regime was active during three seasons: winter 2014-2015, summer 2015 and winter 2015-2016. The information on this new regime have been presented to 19 foreign countries: Austria, Armenia, Great Britain, Germany, Greece, Israel, India, Italy, China, Korea, the Netherlands, the USA, Tadjikistan, Turkey, Uzbekistan, France, Check Republic, Switzerland, Japan.

3.2 The Crimea Factor

In the second half of 2014, a jump in the indicators of the internal tourism flow was observed. Specifics of this change at the Russian market of internal tourism are explained by the fact that this success has been achieved due to changes in geopolitical situation. The following changes took place:

- The territory of the State has been expanded.
- The popularity of the Crimea as a tourist destination has increased among Russian citizens.

- The opportunity was presented to compare prices for summer recreation in Russia and abroad.
- The demand was stimulated by mass media and by the state departmental recommendations to civilian service clerks to enjoy tourism services within the territory of the Russian Federation.

3.3 Factor of the World Oil Prices

Indirect effect was produced by the dynamics of oil prices on all three sectors of tourism services (inflow, outflow and internal). Inasmuch as export of oil and oil products is a balance making item in Russian payment balance and the exchange rate of national currency depends on this factor, a conclusion can be made that dependency of the situation at Russian market of tourism services on the dynamics of oil prices is a characteristic feature of Russian economy.

The situation at the Russian market of tourism services is described below:

3.3.1. Internal Tourism

With a drop in the national currency exchange rate, the businessmen in Russia are forced to increase prices for the majority of goods, including those comprising the consumer goods basket; there at, the industries that employ imported equipment, use imported raw materials, etc. and are directly dependent on currency fluctuations, do not have possibilities for active development within the periods when the exchange rates of foreign currencies grow. As a result, the paying demand for tourism services from some Russian citizens may fall.

3.3.2. Outflow Tourism

As well as any other imported goods, the services of outflow tourism lose competitive power and attractiveness when the exchange rate of national currency drops. If this situation occurs in a country where tourist sector is less developed as compared to other countries (as it is in Russia), but is, at the same, financially much more accessible, then this facilitates redistribution of tourism flow and stipulates lower percentage of those travelling abroad in overall flow of tourists.

3.3.3 Inflow Tourism

When the exchange rate of the national currency drops, the export of tourism services to other countries, sup-

posing that all other conditions are equal, becomes more attractive for foreigners as their expenses decrease.

The models for describing interrelations between dollar exchange rate and the oil prices developed so far are used in the studies of many Russian researchers.

With the help of correlation and regression analysis method, the authors of this study will try to test the hypothesis on correlation between the amounts of inflow and outflow of tourists and the currency exchange rate¹⁹.

3.3.4 Specific Features of applying the Method of Correlation and Regression Analysis

The idea of correlation and regression analysis implies statistical method of investigating the effect produced by one or more independent variables on the dependant variable. Independent variables are otherwise called regressors or predictors and the dependent variables are called criterion variables. This type of analysis includes two separate constituent elements: Correlation and regression analysis²⁰.

Correlation and regression analysis is one of the means to solve the problems and to search for the information. It makes it possible to determine mutual effect produced by multiple interrelated and simultaneously acting attributes as well as the separate effect of each attribute on the economic phenomenon (process). Due to this type of analysis, it is possible to estimate the degree of interrelation between several attributes, between the attributes and the obtained result and also it is possible to build a model of regression equation describing the form of interrelation.

Correlation and regression analysis of economic processes is subdivided in several stages:

- Determining arguments and preliminary processing of conditional information;
- Determining the closeness and the form of interrelations between several attributes;
- Modeling presented economic process and analyzing the obtained model;
- Applying the results to improve model planning and management.

The purpose of regression analysis is to measure the connection existing between the dependent variable and one (pair regression analysis) or several (multiple regression analysis) independent variables. Independent variables are also called factor variables, explaining

or determining variables, regressors and predictors. Dependent variable is sometimes called the determined, the explained variable, “response”. Regression analysis has been widely applied in empirical studies not only because it is a very convenient tool for testing hypotheses. Regression, especially a multiple regression is an efficient method for modeling and forecasting²¹.

For purposes of analysis (see Table 2, Table 3) the most significant indicators have been selected that characterize the development of economy in the country and the level of well-being of population within the period of 2004-2014²². To analyze the effect produced by the identified factors on tourism development (expressed as amounts of tourism flows) the following indicators have been selected:

- Consumer price index inflation, % as compared to previous period (CPI);
- Average weighted exchange rate of a foreign currency, namely, USA dollar to ruble (Currency);
- Gross domestic product per capita, USD (GDP);
- Share of population with income lower than the cost of living, % (LOWINC);
- Unemployment rate, % (UNEMPLOY);
- Average wages, USD (WAGE);
- Resulting indicator, the number of Russian citizens who left abroad for the purpose of tourism, men. (OUT).

Table 2. Analysis of sample correlations

	OUT	CPI	CPI	CURRENCY	UNEMPLOYMENT	LOW INCOME	WAGE
OUT	1.0000	-0.61	0.91	-0.78	-0.75	-0.89	0.95

Table 3. Analysis of sample correlations

IN	CPI	GDP	CURRENCY	UNEMPLOYMENT	LOW INCOME	WAGE
1	-0.37	0.67	0.46	-0.69	0.79	0.75

Regression analysis starts with analyzing sample correlations. Correlation analysis developed by K. Pearson and J. Yule, is one of the methods of statistical analysis of interrelations between several attributes, a component of vector random variable.

Main task of correlation analysis is to evaluate the degree of interrelation between random values. Applying statistical software package EViews (Version 3.1) the authors calculated the indicators of correlative dependency, represented in Table 2.

All selected variables produce considerable effect on the amount of outflow tourism, as corresponding correlations with variable OUT are greater than 0.5 in their absolute values.

Consequently, the outflow of tourists in Russia is reversely dependent on such indicators as level of inflation, unemployment rate, a number of people with income lower than the cost of living and dollar exchange rate; and it is directly dependent on average wages and GDP per capita. This supports our hypothesis and clearly proves that dynamics of outflow tourism depends on well-being of population and on foreign currency exchange rate.

As regards inflow tourism, to test the hypothesis on the effect produced by currency exchange rate on this sector of the market, the following indicators have been selected:

- Consumer price index inflation, % as compared to previous period (CPI);
- Average weighted exchange rate of a foreign currency, namely, USA dollar to ruble (Currency);
- Gross domestic product per capita, USD (GDP);
- Share of population with income lower than the cost of living, % (LOWINC);
- Unemployment rate, % (UNEMPLOY);
- Average wages, USD (WAGE);
- Resulting indicator, the number of Russian citizens who arrived in Russia with purposes of tourism, men. (IN).

Thus, the strongest effect on inflow of tourists is produced by such indicators as GDP per capita, unemployment rate, share of population with income lower than the cost of living, average wages. The effect produced by currency exchange rate is weak but it still is of some significance because the indicator is quite close to the value of 0.5. The calculations have shown that the level of inflation is of very little significance. This is well explained by the fact that the level of well-being of population in the country can generally affect the quality of services

and the conditions of accommodating the foreign tourists. As regards dollar exchange rate, it can be maintained that weakening Russian ruble after devaluation, no doubt, makes tourism to Russia more profitable and attractive.

4. Discussion

As a result of creating different modifications of linear, exponential and power-law models, the authors have compiled a comparative table of characteristics of the built models (Table 4).

Thus, the exponential model has proved to be the best one. Its formula is given below:

$$OUT = 1,2 \cdot CPI^{0,3} \cdot GDP^{0,8} \cdot CURRENCY^{0,8} \cdot LOWINCOME^{0,8} \cdot e^{0,002 \cdot WAGE - 0,9 \cdot UNEMPLOYMENT}$$

Upon having compared the predicted values obtained with the help of the model equation with the real values of the number of tourists who left abroad, a deviation of 0.9% – 1% have been discovered that does not exceed the admissible normal tolerance.

Thus, the check (see Table 4) has shown that the model has been built correctly. In the area of changing amounts of outflow tourism the impact of oil prices is significant and in the area of inflow tourism this impact is not so evident but it is still of some importance. Accordingly, this explains the fact that in the situation under study the inflow tourism has not been revealing any considerable growth notwithstanding some decrease in the cost of services. In this case, the impact produced on inflow tourism by oil prices and by changing dollar exchange rate to ruble proves to be not as strong as political and information factors, related to economic sanctions and political challenges.

5. Conclusion

Thus, in order to identify the factors affecting the trade in tourism services in Russia this study employed such scientific methods as analysis of statistical data on the trends of developing the world market of tourism services, as well as on the competitiveness of the participating countries at this market including the Russian Federation; synthesis of data on the factors affecting the market of tourism services in Russia, correlation and regression analysis for identifying the interrelations existing between the world oil prices and the exchange rate of ruble and also between ruble exchange rate and export, between ruble exchange

rate and import of tourism services in Russia.

The authors of this study have characterized the ideas and the types of the tourism service market; they identified major trends of developing the world market of tourism services based on analysis and synthesis; studied the indicators of competitiveness of both Russia and foreign countries at the world market of tourism services.

The authors identified fundamental and specific factors affecting the role of the Russian Federation in international trade in tourism services. Fundamental factors included the factors of original tourism potential and the factors of governmental regulations at the market of tourism services. Some specific factors such as factor of Olympic Games, factor of Crimea and the factor of changing world oil prices have been identified.

Then, the authors have characterized the effects produced by these specific factors on the changes in the

Table 4. Selecting the best model

Model designation	Significance	Corrected determination coefficient	Medium relative precision	Parameter significance						Residual sum of squares
				CPI	CURRENCY	GDP	UNEMPLOYMENT	LOW INCOME	WAGW	
Exponential	Yes	0.592384	97.34%	Yes	Yes	Yes	Yes	Yes	Yes	127,542
Power-law	Yes	0.851299	37.68%	Yes	No	Yes	Yes	Yes	Yes	156,175
Linear	Yes	0.860634	36.47%	Yes	Yes	Yes	Yes	Yes	Yes	116,107

Table 5. Comparing real values with forecasted values of the number of Russian citizens who left the country for tourism

Year	Real number of those who left	Forecasted number of those who left	Deviation, persons	Relative deviation
2004	6,557,000	6,583,617	26,617.2	0.41%
2005	6,785,000	6,716,967	-68,033	-1.00%
2006	7,753,000	7,733,796	-19,204	-0.25%
2007	9,368,968	9,374,444	5,475.79	0.06%
2008	11,313,697	11,387,786	74,089.4	0.65%
2009	9,542,107	9,559,924	17,817.3	0.19%
2010	12,605,053	12,571,725	-33,328	-0.26%
2011	14,495,894	14,690,821	194,927	1.34%
2012	15,332,136	15,596,793	264,657	1.73%
2013	18,291,737	18,581,836	290,099	1.59%
2014	17,611,569	17,811,500	199,931	1.14%

Source: Developed by the authors based on regression analysis with software package EViews (Version 3.1).

amounts of import and export of tourism services in Russia.

Particularly, as a result of regression analysis, it was proved that in the area of changing amounts of outflow tourism in Russia the impact of oil prices is significant, but in the area of inflow tourism in Russia this impact is not so evident but is of some importance still.

Under the circumstances, largest Russian tour operators and other companies operating at Russian market use to intensify internal tourism development along with international tourism or even establish internal tourism as a separate line of business.

The results obtained in this study can be used by practitioners in the sector of international tourism as well as by governmental authorities regulating operations at the Russian market of tourism services.

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