

TOURISM AS A GENERATOR OF INCOME AND EMPLOYMENT IN THE ECONOMY OF ISTRIA

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Abstract

In this paper, the authors explore the tourism industry and its role in increasing income and employment in the Istrian economy. The research in this paper is based on tourism that generates production growth in all branches and activities of the general economy that directly or indirectly meet the tourist needs, thus contributing to the growth of income and employment in the same. The purpose of this paper is to investigate the correlation and effects of tourism in generating income and employment. The research will confirm the hypothesis that tourism generates revenue and employment in all activities of the economy. The survey is conducted on the example of Istria.

Key Words: *tourism, Istrian economy, income, employment, tourist needs*
JEL classification: Z32

Introduction

From an economic point of view, tourism represents a highly sophisticated integral system within a national economy that consists of interconnected, heterogeneous, dependent and complementary fragments of different economic branches and activities that together form a logical, functional and balanced unit. It is a set of complementary products and services of various industries. The economic effects of tourism are the result of a series of market interactions (Frechtling, 1999) and interdependent on a direct and indirect basis. The economic effects of tourism are the changes that arise in the structure of the economy (Lee, Chang, 2008, Oh 2005) of tourist-emitting, transitory and tourist-

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receptive areas because of tourism trends and tourist consumption and ultimately tourism development.

Tourism spending is the basis of all the economic effects of tourism that are attained by its development (Kim et al., 2006, Kesar, 2008, Ashley, 2006, Brida et al., 2008, De Agostini et al 2005, Singh et al., 2006, Zhang et al.), and is realized in three stages:

- in the place of permanent residence in the emitting tourist country (before and after the trip),
- on the way in a transit country (by destination and on return),
- in a tourist destination in a receptive tourist country (or more if it is a season)

Tourism through tourism consumption generates general economic growth and development at all levels of the economy.

The purpose of this paper is to evaluate tourism consumption and then analyze its effects on increasing income and employment in branches and activities and in total in the economy of Istria (Šutalo et al., 2011). This research proves the assumption that tourism generates income and employment in the branches and activities and economics of Istria as a whole. The hypothesis is based on a theoretical basis explaining how tourism contributes to increasing income and employment in the economy, particularly in those industries where products and services are directly or indirectly met by the needs of tourists. These effects are realized in the regional or national economy, in emitting, transitory, receptive regions and countries (Kesar, 2006).

Research methodology

Research in this paper is based on primary and secondary sources, and approaches and methods based on the attitudes of domestic and foreign authors. The paper sets out the basic objective of assessing the contribution that Istria's tourism has achieved in the pursuit of increasing income and employment in branches and industries and in general in the entire economy. The effects of tourism in the economy will be explored by means of a coefficient of yield-receiving from input-output analysis (Dwyer et al., 2005, Zhang et al., 2008, Singh et al., 2006, De Agostini et al. Brida et al., 2008, Kesar, 2008, Ružić, Amidžić, 2017).

In this paper for determining the influence of tourism in the Istrian economy, the income-yield coefficients for the Croatian economy were used from the input-output analysis (Šutalo, et al., 2011). By adjusting and linking the earnings data by activities, the basis for the estimation of contributions was created using Leontief's inverse (I-A⁻¹), whose coefficients were adjusted for the Istrian economy and taken from work (Šutalo et al., 2011).

For this research, data on visitors and nights spent and financial indicators on the trends of income and employment in certain activities and for the economy of Istria were used. The data for this survey are taken from four sources: a) from the income statement (GFI-POD 2014, 2015, 2016 and 2017. HGK ŽK Pula processing), b) a number of tourists and overnight stays from the publication (Press release, D) Leontief's inversion was taken from the input-output analysis for Croatia in 2005, which was produced and published in the work (Šutalo et al., 2011).

Research goals and hypotheses

The basic objectives of the research are to detect the contribution of tourism to the increase of income and employment in the economy of Istria. The specific goals are to determine the scale and structure of the economy and how tourism affects the increase in income and employment in individual businesses and the economy. In this regard, a hypothesis is claimed that tourism generates revenue and increases employment in all branches and activities of the economy of Istria, and those directly or indirectly with their products or services satisfying the needs of tourists.

The hypothesis is tested on the example of Istria (the Istrian County), based on the usual approach and methods known to domestic and foreign scientists.

Restrictions on precise calculation of tourism effects

Tourism has an important role and influence on the economy. But its importance and impact cannot be accurately assessed for several reasons. Difficulties arise to a large extent because tourism in national accounts is not expressed as a separate sector (Šutalo et al., 2011). Tourism cannot be reduced to one economic activity, but it must be a set of different activities. The additional difficulty in measuring the effects of tourism as stated (Hara, 2008) derives from the characteristics of tourist products

which are in part inexhaustible and are not easy to measure either by physical or financial indicators.

Furthermore, difficulties are evident in the process of creating and maintaining the tourism statistics system, in particular, there are several critical aspects to be taken into account and directly affect the inconsistency of the indicators, namely: the coverage of tourism in the national economy, with no inclusion or non-inclusion of individual effects activity and ultimately the problem is the treatment of the grey economy, as the difference between aversion and legal activity.

Results

The research in this paper is carried out in the Istrian County. As the economic effects of tourism in the Istrian economy are explored, tourism development has been included within the framework of the survey, and the results achieved by visitors, nights and tourist consumption are measured. Then an estimate of the contribution of tourism to the increase of income and employment in the economy of Istria was carried out.

Development of Istria tourism

Tourism statistics in Istria date back to the end of the 19th century (Blažević, 1987), however, considering the total tourist achievements, primarily the number of tourists and accommodation units, it is possible to allocate six development periods (Blažević, 1987; Ružić & Demonja, 2015):

1. Beginnings of tourism in Istria (until the beginning of World War I)
2. Tourism in Istria during and between the two world wars (1914-1945)
3. Reconstruction of the economy and intensive growth of tourist capacities (1946 - 1980)
4. Promotion of tourist offer with amenities (1980-1990)
5. Improvement and increase in the quality of the tourist offer (1990 - 2000)
6. Focus on special forms of tourism (2000 to present).

The initial development of tourism before the First World War, recorded on the Brijuni Islands and in the towns of Poreč, Rovinj and elsewhere, is quite disturbing in the period between the two world wars (Blažević, 1987).

Table 1: *Accommodation capacities and tourist traffic in 1912*

Area of Istria with Opatija	Number of tourist destinations	Number of tourist facilities	Number of tourist beds	Total number of tourists	Share of Opatija in terms of tourists arrivals
Istra	19	343	12.822	114.162	54.696 -48%

Source: *Blažević, 1987*

By the late 60s of the 20th century, tourism gained a significant economic and social role in Istria, and then became the dominant economic and social reality of Istria (Table 2).

Table 2: *Movement of visitors and overnight stays in Istria and Croatia (1953-1968)*

Year	Istria without Opatija		Croatia		% share of Istria in Croatia	
	Visits	Nights	Visits	Nights	Visits	Nights
1953	29.629	122.720	862.443	3.552.482	3,4	3,4
1960	147.127	1.176.510	1.772.442	9.546.809	8,3	12,3
1968	529.082	4.504.017	3.812.384	22.290.650	13,9	20,2
Indeks 1968/1953.	1785	3670	442	627	-	-

Source: *Racan, 1969,*

During this period there is an intense growth in tourism, which is reflected in the increase in the number of visitors as well as in the increase of tourism in Istria compared to Croatia.

In the period from 1970 to 1980, there is an intensive development of accommodation, catering and entertainment facilities for tourists. The basic feature of this period is the construction of large accommodation facilities with a capacity of 400 to 1500 beds of elementary technical and technological equipment.

Table 3: *Tourism Development Indicators of Istria from 1970 to 2015*

Year	Total accommodation capacity	Place in campsites	Total	
			Visits in 1000s	Nights in 1000s
1970	111.400	46.120	744	6.556
1980	198.300	102.332	1.708	16.237
2000	217.924	106.067	2.080	14.284
2010	230.122	113.525	2.737	19.041
2015	266.491	124.930	3.570	23.668

Source: *Institute for statistics – Rijeka, 1986; Akilić (2012); Chamber of tourism – Istria (2010, 2015); Statistical almanac of Republic of Croatia (2016)*

After the extremely rapid growth of tourist capacities and the number of tourists, in the period from 1980 to 1990 there was a slowdown in the intensity of new facilities and capacity building. In this period, tourism was focused on improving the supply of new amenities to meet the ever-increasing demands and needs of tourists (Ružić and Demonja 2015; Ružić, Amidžić, 2018.) and pay more attention to the tourists, their needs for entertainment, sports and recreation, as well as the equipment of the hotel with additional amenities. Also, the first marinas for nautical tourism were built in this period, and parcels were built in the camps and built up additional entertainment, sports and recreational facilities for tourists.

From 1990 to the beginning of 2000, all efforts are focused primarily on raising the quality of accommodation and food service delivery. The introduction of computerization in business processes also begins. These guidelines continue to this day. It is improving its business and management by introducing into the business of modern information systems for monitoring and managing processes in accommodation units and destinations. At the beginning of 2000, the direction of tourism development in Istria, along with existing quality-building efforts, moved in the direction of orientation to selective forms of tourist offer. This is to some extent envisaged by the Master Plan of Tourism of Istria (Istarska County, 2003) which places the emphasis on culture and natural attractions, gastronomy, etc. besides the classic "sun and sea" offer.

Changes occur in different forms of accommodation offerings. From the beginning of the 1990s to the present day, hotels are being refurbished by connecting two rooms to one with complete equipment (air-conditioning,

television, video, etc.), swimming pools, wellness facilities and the like to satisfy every wish and needs of the tourists. In camps, apart from parcels, new accommodation forms (mobile homes) are introduced, swimming pools and other facilities are preferred to tourists. In the second half of the 1990s, tourism started to develop in rural areas as well. Small accommodation facilities are becoming increasingly popular and are noticed in the structure of accommodation capacities. In this development period, it is starting to think about sustainable development, and in the development of tourism in Istria, start to apply and monitor sustainability indicators.

Thus, Istria has become one of the most developed tourist destinations in Croatia.

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Today, in Istria, great importance is attached to the sustainable development of tourism. Actors in the tourism development of Istria become aware that this is the right alternative for the future of tourism, which are the key factors:

- Multidisciplinary approach (economic, ecological and sociocultural analysis),
- Constant consultations with stakeholders, private and public companies, households renters of rooms, tourism organizations, nature protection associations, cultural heritage, and population and tourists,
- Openness to development (organizing public hearings, engaging media, communicating strategic development stakeholders and the local community), and
- Development that becomes a long-term and flexible project, open to complement depending on changes in the environment.

Istria tourism in Croatia occupies a significant place, as evidenced by the data in Table 4.

Table 4: *Istrian tourism in Croatian 2016.*

Indicator type	Istria	Croatia	Tourism in Istria as a share of Croatia (%)
Capacity	294.339	1.133.751	25,9
Achieved visits	3.851.405	15.463.160	24,9
Achieved nights	25.003.197	77.918.855	32,0
Average stay	6,5	5,0	-

Source: *Chamber of tourism – Istria (2016); Statistical almanac of Republic of Croatia (2016)*

In 2016 Istria has available to tourists the total accommodation capacity of 294,339 accommodation units (beds and places in camps). With the total capacity of Istria, it participates 25.9% in the total capacity of Croatia.

In 2016, there were over 3.8 million arrivals in Istria, representing 24.9% of total Croatian arrivals, and over 25.0 million overnights or 32.0% of the realized in Croatia. The average stay of tourists in Istria is 6.5 days and is higher than the Croatian average, which is 5.0 days.

Revenues of the Istrian economy by activities and employees

Tourism and its effects are recognized in all parts of the GDP. Most of the expense of tourists belongs to personal consumption. These expenditures are going through the entire economy and so tourism affects almost all sectors of business and economy. Table 5 shows revenues and employees in the economy of Istria for 2015 and 2016. Revenues are as evident from the table aggregated in 10 activities, with "market services" according to National Classification of Activities NN 52/03, cover areas (J) Financial Operations and (K) Real estate, renting and business services. While "non-market services" include areas (L) Public Administration and Defense, Mandatory Social Security, (M) Education, (N) Health Care and Social Welfare, (O) Other Social, Social and Personal Services Without Culture, Sport and Recreation and (P) household activities.

Table 5: *Income and Employees in the economy of Istria (2015, 2016)*

Occupation	2015		2016	
	Income per occupation	Employees	Income per occupation	Employed
Agriculture forestry and fishing	260	539	258	515
Mining and Instrustry	7.359	11.767	8.188	12.428
Electricitty and water supply	1.329	1.668	1.305	1.676
Construction	1.957	4.219	2.197	4.338
Wholesale and retail	5.704	6.328	6.218	6.415
Hotels and restaurants	5.061	8.606	5541	10.175
Transportation	615	1.171	666	1.176
Market services	5.301	5.259	3.95	5.272
Sport and Recreation	334	675	384	731
Non-market services	1.474	3.017	1.711	3.272
Total	29.399	43.249	30.418	45.998

Source: *GFI-POD 2015, 2016, HGK ZK Pula, Turistička zajednica Istra (2010). Dolasci i noćenja turista po turističkim zajednicama, dostupno na: http://www.istra.hr/app/upl_files/TZIZ_2010.pdf and Turistička zajednica Istra (2016). Dolasci i noćenja turista po turističkim zajednicama, dostupno na: http://www.istra.hr/app/upl_files/TZ_2015_01-12.pdf*

In the economy of Istria, over 29.3 billion kuna revenue was realized in 2015 and 30.4 billion in 2016. In the structure of the income of the Istrian

economy, in absolute terms, the largest share has revenues from industry and mining, trade, third place is revenue from market services and in fourth place is the income of catering. Following are the revenues from construction, non-market services, transportation, etc. In the economy of Istria, in 2015, there were 43,249 employees employed, while in 2016 there were 45,998 employees. Most employees by industry are employed in industry and mining and in the second place by a number they are employed in the catering industry.

Direct and indirect generated income from tourism in the economy of Istria

Table 6 below shows the estimated total income from tourism in the Istrian economy. These revenues were generated by direct and indirect tourist consumption and were estimated based on the matrix multiplier coefficient and column vector calculated for Croatian 2005 (Institute for Tourism, 2008).

Table 6: *Generated value added from tourism in Istrian economy in 2015, 2016 (in millions of HRK)*

Occupation	Income per occupation		% of tourism consumption	Income generated	
	2015	2016		2015	2016
Agriculture forestry and fishing	260	258	0,155	40	40
Mining and Instrustry	7.359	8.188	0,124	917	1.015
Electricity and water supply	1.329	1.305	0,179	238	234
Construction	1.957	2.197	0,053	104	116
Wholesale and retail	5.704	6.218	0,122	696	759
Hotels and restaurants	5.061	5541	0,946	4.788	5.242
Transportation	615	666	0,220	135	147
Market services	5.301	3.95	0,108	573	427
Sport and Recreation	334	384	0,267	89	103
Non-market services	1.474	1.711	0,051	75	87
Total	29.399	30.418		7.635	8.170

Source: *the calculation is based on the percentage of matrix multipliers and vector of Croatian tourist consumption for 2005 (Institute for tourism, 2008)*

From the table it is noticeable that the economy of Istria realized over HRK 29.3 billion in revenues in 2015, and in 2016 it is over HRK 30.4 billion. In this revenue, the revenue generated by tourist consumption is over HRK 7.6 billion or 25.9% in 2015 and in 2016 it is more than 8.1 billion or 26.8%.

It is inescapable for tourism to contribute to GDP, but there are certain problems that arise when trying to calculate it specifically. As stated (Koncul, 2009), tourism is "particularly difficult to estimate because of the unclear definition of services that are its component.

Under direct observation of expenditure, it is thought to monitor tourists during their spending, but this is not possible, and this is the only alternative offered by finding a group of tourists who will follow and record their expenses. Furthermore, direct observation of receipts implies collecting data on receipts from sales to tourism, such data can be obtained from state institutions or through reported revenue / tax. "Analyses have shown that the value of sales of travel or transportation is fairly accurate, while the values, relating to entertainment, rest, accommodation and the like, less accurate (Koncul, 2009). "This may be due to the sale of services to tourists or because of non-payment of taxes or work on" blacks ". Contrary to direct observation is a survey which, when conducted with tourists, speaks of the value of tourism and in certain situations (by ejecting bias) is very reliable. They are mainly conducted at the entrance and exit of tourists from the destination or country they visit. Households can also be surveyed in which tourism expenditure is estimated at their starting point and are distinguished from total expenditures. It is highly probable that using this method will collect the correct and reliable data. Each of the above methods has its advantages and disadvantages, (Koncul, 2009), therefore it is necessary to carefully approach the tourism research and use more than one method of research to increase the ability to make the right conclusions.

Some of the positive and negative items that are the reason for the difficulty in the calculation are (Koncul, 2009):

1. Non-subscriber services - those services that do not have an economic transaction related to a specific payment but are implemented in other ways such as reciprocal or barter payments. An example of this may be mutual donation between foreign tourists and hosts

2. Unrecognized services - are those services for which payment has been made but never formally calculated. This is mainly the case when tax evasion is to be avoided and is called a black or sometimes gray economy.
3. Abstraction Costs - Costs that fall under one activity and are calculated in the second. For example, if a tourist buys a real estate and uses it as a vacation home, he does not pay the accommodation costs as an owner, but can be said to pay an abstract rent to himself which is equal to the market price he paid for the property.
4. Distribution of public and private income - the difference between revenue generated by the private sector in one activity and the public sector costs in other activities may cause problems with double taxation.
5. Imbalances in the balance of payments - the problems of calculating investments in tourism and tourism revenues expressed in the fluctuating currency
6. Social Costs and Benefits - There are positive and negative externalities of tourism's impact on a particular environment. For example, the benefits that tourism can bring to a destination can cause major losses to some other activity in the same destination, and there are problems related to the calculation of real incomes or the loss of tourism in the destination or country
7. Public goods - the value of public goods (especially public goods) is growing with tourism, but this value cannot be specifically stated because free use to all of them and the only way of calculating the value of these goods could be based on imaginative prices that tourists would volunteer to pay.

Table 7: *Tourism affects the increase in income and employment in the economy of Istria*

Year	Nights achieved (in 000s)	Total revenue	Employees	Index 2016/14	Index 2016/14	Index 2016/14
2014	22.274	27.244	42.020	-	-	-
2015	23.668	29.399	43.249	106	108	103
2016	25.003	30.418	45.998	106	103	106
2017	27.509	33.365	50.667	110	110	110

Source: *Authors*

Table 7 shows the trends of realized overnight stays, total income and employment in the Istrian economy. This presentation will try to respond to the hypothesis that tourism affects the increase in income and employment in the economy of Istria.

The growth of overnight stays corresponds to the growth of total income and employment. The average increase in overnight stays of 7% corresponds to an average increase of 7% of total income and an average growth of 6% employment. This proves the assumption that tourism in Istria creates conditions for earning additional income and new employees, both in certain sectors and in the economy.

Conclusion

Tourism, which from the economic point of view completes the complex of branches and activities through tourism consumption, causes direct and indirect effects on the economy.

In the first step of this research, the development of tourism in Istria was analyzed to determine the achieved volume of visitors, nights of income and employment. The development of Istrian tourism has been analyzed since its beginnings by 2016. In 2016, there were over 3.8 million arrivals in Istria, representing 24.9% of total Croatian arrivals, and over 25.0 million overnights or 32.0% of the realized in Croatia.

In the second step, the impact of tourism development in Istria was explored to increase income and employment. Compared to the increase in the realized overnight stays with realized income and employment, it was established that the average increase of 7% overnight stays corresponds to an average increase of 7% of total income and an average growth of 6% employment. This proves the assumption that tourism in Istria creates conditions for earning additional income and new employees, both in certain sectors and in the economy.

The research carried out has established that the Istrian economy is structured from several activities that directly or indirectly support the tourist offer (catering, trade, agriculture, industry etc.). From this point of view, the Istrian economy is advantageous because in its structure, in a large percentage of its activities, restaurants, which directly support the tourist offer and consumption, ultimately allow for additional income and employment.

The research carried out in this paper has shown that tourism generates effects in all branches and activities of the economy, and that the effects are higher because the activities are directed towards the direct support of the realization of a quality tourist offer.

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