IMPACT OF CHANGES IN VAT SYSTEM ON TOURIST SECTOR GROWTH IN CROATIA

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The purpose of this research paper is to determine the impact of decreasing VAT rate on tourist sector services on the size and performance of the tourist sector activity. The important question is: is there any correlation between VAT rate and tourist sector growth? Also, we will try to determine did these changes in VAT system have any effect on structure of tourist. Especially this means to investigate changes in share of domestic and foreign tourist in total number of tourists. This will be done by observing the number of domestic and foreign tourist arrivals, before and after the change in VAT system. Finally, the purpose of this paper is to conclude whether or not reduced tax rate on tourist sector is justified or not.

Introduction

Value added tax was imposed in Croatian tax system in the beginning of 1998. At that time there was only one rate (22%) used for all goods and services – it was a flat rate system. Changes in VAT system were made in November 1999 when the rate of 0% is introduced. At the beginning of 2006 new rate (10%) was introduced. This rate applies on tourism and from August 2007 on daily press and other periodical journals.

Tourist sector experienced few changes during this, almost a decade of VAT in Croatia. At the beginning tourist services was taxed by general rate of 22%, after that it was prescribed that tourist services paid directly from foreign countries are free of VAT (taxed with 0%). At that time there was difference in tax burden for domestic tourist and foreign tourist that paid used tourist services in Croatia in respect to this foreign tourist that paid used tourist services. Result of that is the same tax status of domestic and foreign tourists. Due to that difference in tax burden is eliminated and amount of tax paid is the same for domestic and foreign tourists.



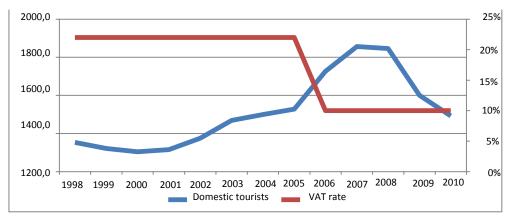
Figure 1. VAT rate on tourist services

Impact of changes in VAT system on tourist sector

In order see what influence has change in VAT rate on tourist services on the size of tourist service consumption, we need to analyze some basic data about Croatian economy.

The proportion of tourist services in total Croatian GDP is around 4%, and it has not changed during last ten years. In the same time Croatian economy has grown by average rate of 2,4% per year.

From 1998 to 2010 tourist sector accommodation capacity has grown, rooms for 8% and beds 18%. In the same period number of foreign tourists has doubled while the number of domestic tourists has not changed significantly. Foreign tourists participate with 86% in total number of tourists according to data from 2010. In 2009 Croatian economy has entered in recession in 2009 and that has continued in following years. The effects of recession can be seen in tourism also, particular on the number of domestic tourists, which has declined in that period.



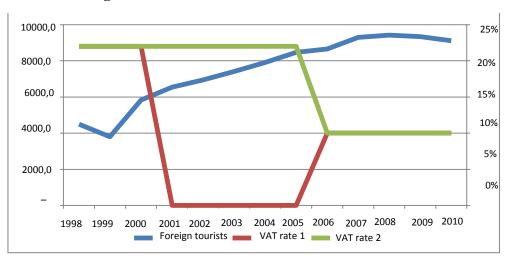


Figure 2. VAT rate and number of domestic tourists

Figure 3. VAT rate and number of foreign tourists

From the above table we can see that number of Croatian tourists rapidly grew after the VAT rate has been decreased from 22% to 10% in 2006. Then in 2009 number of domestic tourist starts to decline due to the fact that in 2009 Croatian economy entered the recession that has continued in upcoming years. Therefore, we have eliminated 2009 and 2010 from the analysis since t he date in those two years are mostly result of the above mentioned recession.

We can see that number of foreign tourists has increased after the VAT rate was decreased from 22% to 0%, and we can also see that after VAT rate for foreign tourists has been flattened to 10% the number of foreign tourists has stagnate. Decreased number of foreign tourists in 2009 and after is also be influenced by world economics crisis.

To describe the degree of relationship between number of domestic and foreign tourists and VAT rate we will use correlation. Correlation between number of domestic tourist and VAT rate decrease from 22% to 10% is -0,92 which is a very strong negative relationship. Correlation between number of domestic tourist and VAT rate (22% and 0%) is -0,68, which is a fairly strong negative relationship, and correlation between number of domestic tourist and VAT rate (22%, 10% and 0%) is -0,58.

Conclusion

From the above analysis we can conclude that there is a strong negative correlation between number of tourists and the VAT rate. That correlation is stronger between domestic tourists and VAR rate than foreign tourists and VAT rate. We can therefore conclude that by reducing VAT rate on tourist services Croatian tourist sector will grow more rapidly, and opposite, if the VAT rate on tourist services is increased that will be followed by decreased number of domestic and foreign tourists.

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Tables

Table 1

Gross domestic product, total and per capita, in the period 1998-2010

	1000	1999	2000	2001	2002	2003	2004	2005	2006	2007	2000	2000	2010
	1998	1999	2000	2001	2002	2005	2004	2005	2006	2007	2008	2009	2010
Gross domestic product, market prices (current), mln HRK	160.603	164.054	176.690	190.796	208.223	228.932	247.428	266.652	291.044	318.308	345.015	335.189	334.564
Average annual exchange rate HRK/EUR	7,13916	7,58182	7,63385	7,47101	7,40698	7,56425	7,49568	7,40005	7,32285	7,33602	7,22318	7,33955	7,28623
Population, mid-year estimate, '000	4.501	4.554	4.426	4.440	4.440	4.440	4.439	4.442	4.440	4.436	4.434	4.429	4.418
Gross domestic product, market prices (current), mln EUR	22.496	21.638	23.146	25.538	28.112	30.265	33.009	6.034	39.745	43.390	47.765	45.669	45.917
Gross domestic product per capita, EUR	4.998	4.751	5.229	5.752	6.331	6.816	7.436	8.112	8.951	9.781	10.771	10.311	10.394
Growth rates (%)	2,1	-1,5	3	3,8	5,4	5,4	4,1	4,3	4,9	5,1	2,2	-6	-1,2
Implicit GDP deflators	108,2	103,7	104,5	104	103,5	104,1	103,8	103,3	104	104,1	106,1	103,3	101

Source: Central Bureau of Statistics, <u>www.dzs.hr</u>

	2003	2004	2005	2006	2007	2008	2009	2010
A, B Agriculture, hunting and forestry and Fishing	4,4	4,7	4,3	4,4	4,1	4,4	4,7	4,8
C, D, E Mining and quarrying, Manufacturing, Electricity, gas and water supply	17,9	18,4	17,8	17,2	16,8	16,8	15,9	16,4
F Construction	5,7	6,2	6,4	6,6	6,6	7,2	6,9	5,8
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	11,7	10,8	11	11,3	11	10,6	9,6	9,5
H Hotels and restaurants	3,6	3,6	3,7	3,6	3,6	3,6	3,8	3,8
I Transport, storage and communication	7,4	7,9	7,7	7,3	6,9	6,6	6,4	6,3
J, K Financial intermediation, Real estate, renting and business activities	17,6	17,8	18,8	19,7	21,4	21,6	23,3	23,5
L, M, N, O, P Public administration and defense; compulsory social security, Education, Health and social work, Other community, social and personal activities, Private households with employed persons	15,3	15,1	15,1	14,7	14,8	15,0	16,1	16,1
Gross value added (basic prices)	83,6	84,5	84,8	84,8	85,2	85,8	86,7	86,2
Taxes on products less subsidies on products	16,4	15,5	15,2	15,2	14,8	14,2	13,3	13,8

GDP structure, at current prices, %

Source: Central Bureau of Statistics, www.dzs.hr

Table 3

Accommodation capacity in tourist sector and number of arrivals and nights in the period 1998-2010

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Arrivals '000													
Total	5.852	5.127	7.137	7.860	8.320	8.878	9.412	9.995	10.385	11.162	11.261	10.935	10.604
Domestic tourists	1.353	1.322	1.305	1.316	1.376	1.469	1.500	1.528	1.726	1.856	1.846	1.600	1.493
Foreign tourists	4.499	3.805	5.832	6.544	6.944	7.409	7.912	8.467	8.659	9.306	9.415	9.335	9.111
Nights '000													
Total	31.852	27.126	39.183	43.405	44.692	46.644	47.797	51.421	53.007	56.005	57.103	56.301	56.416
Domestic tourists	5.307	5.241	5.138	5.021	4.981	5.321	5.281	5.434	5.985	6.431	6.478	5.800	5.424
Foreign tourists	26.545	21.885	34.045	38.384	39.711	41.323	42.516	45.987	47.022	49.574	50.625	50.501	50.992
Accommodation capacity													
Room	291.259	271.854	282.921	289.388	282.900	291.904	299.669	312.741	304.022	326.792	332.060	333.237	315.864
Beds	773.149	719.919		786.027	804.436		871.178	909.210	925.882	944.076	968.610	969.726	909.951

Source: Central Bureau of Statistics, <u>www.dzs.hr</u>